

Medical Policy



Title: Pachymetry

Professional

Original Effective Date: March 11, 2004
 Revision Date(s): November 3, 2005; July 30, 2013; December 11, 2013; March 31, 2015; August 19, 2015; March 16, 2016; October 1, 2016; February 15, 2018; January 16, 2019; October 1, 2020; October 19, 2021
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Institutional

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State and Federal mandates and health plan member contract language, including specific provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage. To verify a member's benefits, contact [Blue Cross and Blue Shield of Kansas Customer Service](#).

The BCBSKS Medical Policies contained herein are for informational purposes and apply only to members who have health insurance through BCBSKS or who are covered by a self-insured group plan administered by BCBSKS. Medical Policy for FEP members is subject to FEP medical policy which may differ from BCBSKS Medical Policy.

The medical policies do not constitute medical advice or medical care. Treating health care providers are independent contractors and are neither employees nor agents of Blue Cross and Blue Shield of Kansas and are solely responsible for diagnosis, treatment and medical advice.

If your patient is covered under a different Blue Cross and Blue Shield plan, please refer to the Medical Policies of that plan.

DESCRIPTION

Ophthalmic ultrasound is done to determine corneal thickness on one or both eyes by using corneal pachymetry, which is non-invasive and painless. Measuring the cornea is done by administering a topical anesthetic into the eye and placing a plastic ultrasonic probe onto the central cornea. Pachymetry uses ultrasound to determine the thickness of the cornea in any given location.

Corneal thickness directly affects assumptions made in the Goldman tonometry formula used in the measurement of intraocular pressure. Corneal thickness provides indirect measurement of physiologic function of the cornea.

POLICY

- A. Pachymetry testing is considered **medically necessary** for the following indications (see Policy Guidelines):
1. Adhesions and disruptions of iris and ciliary body; recession of chamber angle
 2. Degenerations of iris and ciliary body; pigmentary iris degeneration
 3. Borderline glaucoma [glaucoma suspect]; preglaucoma
 4. Borderline glaucoma [glaucoma suspect]; open angle glaucoma with borderline findings, low risk
 5. Borderline glaucoma [glaucoma suspect]; anatomical narrow angle
 6. Borderline glaucoma [glaucoma suspect]; steroid responders (borderline glaucoma)
 7. Borderline glaucoma [glaucoma suspect]; ocular hypertension
 8. Borderline glaucoma [glaucoma suspect]; open-angle with borderline findings, high risk
 9. Open-angle glaucoma
 10. Open-angle glaucoma; primary open angle glaucoma
 11. Open-angle glaucoma; pigmentary glaucoma
 12. Childhood glaucoma
 13. Primary angle-closure glaucoma
 14. Primary angle-closure glaucoma; chronic angle-closure glaucoma
 15. Senile cataract; pseudoexfoliation of lens capsule
 16. Disorders of refraction and accommodation; hypermetropia (with Vision Correction Surgery Coverage)
 17. Disorders of refraction and accommodation; myopia (with Vision Correction Surgery Coverage)
 18. Astigmatism (with Vision Correction Surgery Coverage)
- B. Pachymetry testing is considered **medically necessary, once per year**, for the following indications:
1. Corneal edema
 2. Corneal edema; idiopathic corneal edema
 3. Corneal edema; secondary corneal edema
 4. Corneal edema; bullous keratopathy
 5. Hereditary corneal dystrophies; endothelial corneal dystrophy
 6. Hereditary corneal dystrophies; posterior corneal dystrophy
 7. Mechanical complication of other specified prosthetic device, implant, and graft; due to corneal graft

C. Pachymetry testing is considered **not medically necessary** for the following indications:

1. Routine screening services
2. Glaucoma screening services
3. Routine vision screening

(See Covered Diagnoses section for a listing of codes)

Policy Guidelines

In general, pachymetry is medically necessary once in a patient's lifetime for the indications in Item A. Other examinations will be considered on a case by case basis.

CODING

The following codes for treatment and procedures applicable to this policy are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

CPT/HCPCS

76514 Ophthalmic ultrasound, diagnostic; corneal pachymetry, unilateral or bilateral (determination of corneal thickness)

ICD-10 Diagnoses

H21.231 Degeneration of iris (pigmentary), right eye
 H21.232 Degeneration of iris (pigmentary), left eye
 H21.233 Degeneration of iris (pigmentary), bilateral
 H21.551 Recession of chamber angle, right eye
 H21.552 Recession of chamber angle, left eye
 H21.553 Recession of chamber angle, bilateral
 H40.001 Preglaucoma, unspecified, right eye
 H40.002 Preglaucoma, unspecified, left eye
 H40.003 Preglaucoma, unspecified, bilateral
 H40.011 Open angle with borderline findings, low risk, right eye
 H40.012 Open angle with borderline findings, low risk, left eye
 H40.013 Open angle with borderline findings, low risk, bilateral
 H40.021 Open angle with borderline findings, high risk, right eye
 H40.022 Open angle with borderline findings, high risk, left eye
 H40.023 Open angle with borderline findings, high risk, bilateral
 H40.031 Anatomical narrow angle, right eye
 H40.032 Anatomical narrow angle, left eye
 H40.033 Anatomical narrow angle, bilateral
 H40.041 Steroid responder, right eye
 H40.042 Steroid responder, left eye

H40.043	Steroid responder, bilateral
H40.051	Ocular hypertension, right eye
H40.052	Ocular hypertension, left eye
H40.053	Ocular hypertension, bilateral
H40.10X1	Unspecified open-angle glaucoma, mild stage
H40.10X2	Unspecified open-angle glaucoma, moderate stage
H40.10X3	Unspecified open-angle glaucoma, severe stage
H40.10X4	Unspecified open-angle glaucoma, indeterminate stage
H40.1110	Primary open-angle glaucoma, right eye, stage unspecified
H40.1111	Primary open-angle glaucoma, right eye, mild stage
H40.1112	Primary open-angle glaucoma, right eye, moderate stage
H40.1113	Primary open-angle glaucoma, right eye, severe stage
H40.1114	Primary open-angle glaucoma, right eye, indeterminate stage
H40.1120	Primary open-angle glaucoma, left eye, stage unspecified
H40.1121	Primary open-angle glaucoma, left eye, mild stage
H40.1122	Primary open-angle glaucoma, left eye, moderate stage
H40.1123	Primary open-angle glaucoma, left eye, severe stage
H40.1124	Primary open-angle glaucoma, left eye, indeterminate stage
H40.1130	Primary open-angle glaucoma, bilateral, stage unspecified
H40.1131	Primary open-angle glaucoma, bilateral, mild stage
H40.1132	Primary open-angle glaucoma, bilateral, moderate stage
H40.1133	Primary open-angle glaucoma, bilateral, severe stage
H40.1134	Primary open-angle glaucoma, bilateral, indeterminate stage
H40.1210	Low-tension glaucoma, right eye, stage unspecified
H40.1211	Low-tension glaucoma, right eye, mild stage
H40.1212	Low-tension glaucoma, right eye, moderate stage
H40.1213	Low-tension glaucoma, right eye, severe stage
H40.1214	Low-tension glaucoma, right eye, indeterminate stage
H40.1221	Low-tension glaucoma, left eye, mild stage
H40.1222	Low-tension glaucoma, left eye, moderate stage
H40.1223	Low-tension glaucoma, left eye, severe stage
H40.1224	Low-tension glaucoma, left eye, indeterminate stage
H40.1231	Low-tension glaucoma, bilateral, mild stage
H40.1232	Low-tension glaucoma, bilateral, moderate stage
H40.1233	Low-tension glaucoma, bilateral, severe stage
H40.1234	Low-tension glaucoma, bilateral, indeterminate stage
H40.1311	Pigmentary glaucoma, right eye, mild stage
H40.1312	Pigmentary glaucoma, right eye, moderate stage
H40.1313	Pigmentary glaucoma, right eye, severe stage
H40.1314	Pigmentary glaucoma, right eye, indeterminate stage
H40.1321	Pigmentary glaucoma, left eye, mild stage
H40.1322	Pigmentary glaucoma, left eye, moderate stage
H40.1323	Pigmentary glaucoma, left eye, severe stage
H40.1324	Pigmentary glaucoma, left eye, indeterminate stage
H40.1330	Pigmentary glaucoma, bilateral, stage unspecified
H40.1331	Pigmentary glaucoma, bilateral, mild stage

H40.1332	Pigmentary glaucoma, bilateral, moderate stage
H40.1333	Pigmentary glaucoma, bilateral, severe stage
H40.1334	Pigmentary glaucoma, bilateral, indeterminate stage
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage
H40.20X2	Unspecified primary angle-closure glaucoma, moderate stage
H40.20X3	Unspecified primary angle-closure glaucoma, severe stage
H40.20X4	Unspecified primary angle-closure glaucoma, indeterminate stage
H40.2210	Chronic angle-closure glaucoma, right eye, stage unspecified
H40.2211	Chronic angle-closure glaucoma, right eye, mild stage
H40.2212	Chronic angle-closure glaucoma, right eye, moderate stage
H40.2213	Chronic angle-closure glaucoma, right eye, severe stage
H40.2214	Chronic angle-closure glaucoma, right eye, indeterminate stage
H40.2220	Chronic angle-closure glaucoma, left eye, stage unspecified
H40.2221	Chronic angle-closure glaucoma, left eye, mild stage
H40.2222	Chronic angle-closure glaucoma, left eye, moderate stage
H40.2223	Chronic angle-closure glaucoma, left eye, severe stage
H40.2224	Chronic angle-closure glaucoma, left eye, indeterminate stage
H40.2230	Chronic angle-closure glaucoma, bilateral, stage unspecified
H40.2231	Chronic angle-closure glaucoma, bilateral, mild stage
H40.2232	Chronic angle-closure glaucoma, bilateral, moderate stage
H40.2233	Chronic angle-closure glaucoma, bilateral, severe stage
H40.2234	Chronic angle-closure glaucoma, bilateral, indeterminate stage
H40.2291	Chronic angle-closure glaucoma, unspecified eye, mild stage
H40.2292	Chronic angle-closure glaucoma, unspecified eye, moderate stage
H40.2293	Chronic angle-closure glaucoma, unspecified eye, severe stage
H40.2294	Chronic angle-closure glaucoma, unspecified eye, indeterminate stage
H25.89	Other age-related cataract

Pachymetry once per lifetime for the following codes for patients with Vision Correction Surgery Coverage:

H52.01	Hypermetropia, right eye
H52.02	Hypermetropia, left eye
H52.03	Hypermetropia, bilateral
H52.03	Hypermetropia, bilateral
H52.11	Myopia, right eye
H52.12	Myopia, left eye
H52.13	Myopia, bilateral
H52.13	Myopia, bilateral
H52.201	Unspecified astigmatism, right eye
H52.202	Unspecified astigmatism, left eye
H52.203	Unspecified astigmatism, bilateral
H18.20	Unspecified corneal edema
H18.20	Unspecified corneal edema

Pachymetry may be performed once per year in the following codes:

H52.201	Unspecified astigmatism, right eye
H52.202	Unspecified astigmatism, left eye

H52.203	Unspecified astigmatism, bilateral
H18.20	Unspecified corneal edema
H18.20	Unspecified corneal edema
H18.221	Idiopathic corneal edema, right eye
H18.222	Idiopathic corneal edema, left eye
H18.223	Idiopathic corneal edema, bilateral
H18.231	Secondary corneal edema, right eye
H18.232	Secondary corneal edema, left eye
H18.233	Secondary corneal edema, bilateral
H18.11	Bullous keratopathy, right eye
H18.12	Bullous keratopathy, left eye
H18.13	Bullous keratopathy, bilateral
H18.13	Bullous keratopathy, bilateral
H18.511	Endothelial corneal dystrophy, right eye
H18.512	Endothelial corneal dystrophy, left eye
H18.513	Endothelial corneal dystrophy, bilateral
H18.591	Other hereditary corneal dystrophies, right eye
H18.592	Other hereditary corneal dystrophies, left eye
H18.593	Other hereditary corneal dystrophies, bilateral
H18.599	Other hereditary corneal dystrophies, unspecified eye
T85.318A	Breakdown (mechanical) of other ocular prosthetic devices, implants and grafts, initial encounter
	Displacement of other ocular prosthetic devices, implants and grafts, initial encounter
T85.328A	Displacement of other ocular prosthetic devices, implants and grafts, initial encounter
T85.398A	Other mechanical complication of other ocular prosthetic devices, implants and grafts, initial encounter

REVISIONS

07-30-2013	<p>In Policy section:</p> <ul style="list-style-type: none"> ▪ Revised the following medical policy language: <ul style="list-style-type: none"> "Pachymetry testing will be allowed: <ul style="list-style-type: none"> • Once per lifetime, • Once per lifetime with Vision Correction Surgery Coverage or • Once per year." <p>In Coding section:</p> <ul style="list-style-type: none"> ▪ Added ICD-9 diagnosis code 365.05 <p>Updated Reference section.</p>
12-11-2013	<p>In Coding section:</p> <ul style="list-style-type: none"> ▪ Added ICD-10 Diagnosis codes (<i>Effective October 1, 2014</i>)
03-31-2015	<p>In Policy section:</p> <ul style="list-style-type: none"> ▪ In Item A 1, added "Adhesions and disruptions of iris and ciliary body" ▪ In Item A 2, added "Degenerations of iris and ciliary body" ▪ In Items A 3, 4, 5, 6, 7, and 8, added "Borderline glaucoma [glaucoma suspect]" ▪ In Items A 10 and 11, added "Open-angle glaucoma" ▪ In Item A 14, added "Primary angle-closure glaucoma" ▪ In Item A 15, added "Senile cataract"

	<ul style="list-style-type: none"> ▪ In Items A 16 and 17, added "Disorders of refraction and accommodation" ▪ In Items B 2, 3, and 4, added "Corneal edema" ▪ In Items B 5 and 6, added "Hereditary corneal dystrophies" ▪ In Item B 7, added "Mechanical complication of other specified prosthetic device, implant, and graft"
	In Coding section: <ul style="list-style-type: none"> ▪ Updated nomenclature for ICD-9 codes.
08-19-2015	In Policy section: <ul style="list-style-type: none"> ▪ In Item A, removed "once in a lifetime" and added "(see Policy Guidelines)" to read "Pachymetry testing is considered medically necessary for the following indications (see Policy Guidelines)" ▪ Added Policy Guidelines: "In general, pachymetry is medically necessary once in a patient's lifetime. Other examinations will be considered on a case by case basis."
03-16-2016	Description, Policy, and Coding sections reviewed with no updates.
10-01-2016	In Coding section: <ul style="list-style-type: none"> ▪ Added ICD-10 codes effective 10-01-2016: 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 ▪ Termed ICD-10 codes effective 09-30-2016: H40.11x1, H40.11x2, H40.11x3, H40.11x4
02-15-2018	In Coding section: <ul style="list-style-type: none"> ▪ Removed ICD-9 codes. ▪ Added ICD-10 codes: H40.021, H40.022, H40.023.
	Updated References section.
	Remainder of policy reviewed; no other revisions made.
01-16-2019	Medical policy reviewed; no revisions made.
10-01-2020	In Coding Section: <ul style="list-style-type: none"> • Added ICD-10 codes: H18.511, H18.512, H18.513, H18.591, H18.592, H18.593, H18.599 • Deleted ICD-10 codes: H18.51, H18.59
10-19-2021	Reviewed medical policy no changes

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19. Wilson MR et al. Progression of visual field loss in untreated glaucoma patients and glaucoma suspects in St. Lucia, West Indies *Am J Ophthalmol* 2002; 134:399-405

Other References

1. Blue Cross and Blue Shield of Kansas Ophthalmology Liaison Committee, May 4, 2005 (see Blue Cross and Blue Shield of Kansas Newsletter, Blue Shield Report. MAC-03-05).
2. Blue Cross and Blue Shield of Kansas Optometric Liaison Committee, May 26, 2005 (see Blue Cross and Blue Shield of Kansas Newsletter, Blue Shield Report. MAC-03-05).
3. Blue Cross and Blue Shield of Kansas Medical Advisory Committee meeting, November 3, 2005 (see Blue Cross and Blue Shield of Kansas Newsletter, Blue Shield Report. MAC-03-05).
4. Blue Cross and Blue Shield of Kansas Ophthalmology Liaison Committee, May 2013; May 2014; May 2015; June 2016.
5. Blue Cross and Blue Shield of Kansas Optometry Liaison Committee, May 2013; May 2014.