NO. 91529

REFRACTIVE KERATOPLASTY / LASIK

Effective: 09/01/2026
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Instructions for use: This document is for informational purposes only. Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable. Eligibility and benefit coverage are determined in accordance with the terms of the member's plan in effect as of the date services are rendered. It is not an authorization, certification, explanation of benefits, or contract. Receipt of benefits is subject to satisfaction of all terms and conditions of coverage. Priority Health's medical policies are developed with the assistance of medical professionals and are based upon a review of published and unpublished information including, but not limited to, current medical literature, guidelines published by public health and health research agencies, and community medical practices in the treatment and diagnosis of disease. Because medical practice, information, and technology are constantly changing, Priority Health reserves the right to review and update its medical policies at its discretion. Priority Health's medical policies are intended to serve as a resource to the plan. They are not intended to limit the plan's ability to interpret plan language as deemed appropriate. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment they choose to provide.

Policy scope: This medical policy addresses refractive keratoplasty, post-cataract or post-transplant corneal surgery, and intrastromal corneal ring segments (INTACS)

Related policies:

- No. 91538 Vision Care
- No. 91306 Prosthetics – External
- No. 91645 Digital Therapeutics

I. MEDICAL NECESSITY CRITERIA

A. INCLUSIONS

1. **Refractive Keratoplasty**: Refractive keratoplasty, including **phototherapeutic keratectomy (PTK)**, may only be considered medically necessary when it is being used to treat specific lesions of the cornea, remove scar tissue from the visual field, or otherwise address an abnormality of the eye.

   PTK may be medically necessary for members with any of the following:

a. Superficial corneal dystrophy, including granular, lattice and Reis-Buckler's dystrophy
b. Epithelial membrane dystrophy
c. Irregular corneal surfaces due to Salzmann's nodular degeneration or keratoconus nodules
d. Corneal scars and opacities including post-traumatic, post infectious, post-surgical and secondary to pathology
e. Recurrent corneal erosions when more conservative measures such as lubricants, hypertonic saline, patching, bandage contact lenses, gentle debridement of severely aberrant epithelium have failed to halt the erosions

2. **Post-Cataract or Post-Transplant Corneal Surgery**: Correction of surgically induced astigmatism with a corneal relaxing incision or corneal wedge resection is considered medically necessary when all of the following apply:
   a. One of the following:
      i. member had previous penetrating keratoplasty (corneal transplant) within the past 60 months, OR,
      ii. Member had cataract surgery within the last 36 months,
   b. Both of the following:
      i. The degree of astigmatism is 3.00 diopters or greater, AND,
      ii. The member must be intolerant of glasses or contact lenses.

   Correction of surgically induced astigmatism with a corneal relaxing incision or corneal wedge resection is covered when medical necessity criteria are met, even if the member's plan excludes refractive surgery.

3. **Intrastromal corneal ring segments (INTACS)**: These are considered medically necessary for reduction or elimination of myopia or astigmatism in persons with keratoconus or pellucid marginal degeneration who are no longer able to achieve adequate vision using contact lenses or spectacles and for whom corneal transplant is the only remaining option.

B. LIMITATIONS AND EXCLUSIONS

1. **Cosmetic refractive surgical procedures**: Refractive surgical procedures performed solely to correct myopia (nearsightedness), hyperopia (farsightedness), astigmatism (imperfection in the curvature of the cornea), or presbyopia (gradual loss of ability to focus on nearby objects, acquired with age) are considered not medically necessary.
2. **PTK for treatment of infectious keratitis**: PTK has not been shown to be safe and effective for this indication and is therefore considered experimental and investigational and not medically necessary.
3. **PTK in combination with collagen cross-linkage** is not medically necessary and considered experimental and investigational.

4. **The following refractive surgical procedures** are considered not medically necessary:
    a. Photorefractive Keratectomy (PRK)
    b. Laser in situ Keratomileusis (LASIK)
    c. Laser Epithelial Keratomileusis (LASEK)
    d. Radial Keratotomy (RK)
    e. Laser Thermokeratoplasty (LTK)
    f. Phakic Intraocular Lens (IOL) Implantation
    g. Clear Lens Extraction (CLE)
    h. Phakic Intraocular Lens Implantation
    i. Intracorneal Inlays
    j. Automated Lamellar Keratoplasty (ALK)
    k. Hexagonal keratotomy
    l. Conductive keratoplasty (CK)
    m. Minimally invasive radial keratotomy (mini-RK)

II. CENTERS FOR MEDICARE & MEDICAID SERVICES (CMS) COVERAGE DETERMINATION

Any applicable federal or state mandates will take precedence over this medical coverage policy.

Medicare: Refer to the CMS Online Manual System (IOMs) and Transmittals.
For the most current applicable CMS National Coverage Determination (NCD)/Local Coverage Determination (LCD)/Local Coverage Article (LCA) refer to CMS Medicare Coverage Database.

The information below is current as of the review date for this policy. However, the coverage issues and policies maintained by CMS are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. MAC jurisdiction for purposes of local coverage determinations is governed by the geographic service area where the Medicare Advantage plan is contracted to provide the service. Please refer to the Medicare Coverage Database website for the most current applicable NCD, LCD, LCA, and CMS Online Manual System/Transmittals.

National Coverage Determinations (NCDs)	
Refractive Keratoplasty 80.7	
Local Coverage Determinations (LCDs)	
CGS Administrators, LLC	None identified
First Coast Service Options, Inc.	None identified
Wellpoint Federal (formerly National Government Services, Inc.)	None identified
Noridian Healthcare Solutions	None identified
Novitas Solutions, Inc.	None identified
Palmetto GBA	None identified
WPS Insurance Corporation	None identified

III. BACKGROUND

The basic parts of the human eye include the cornea, pupil, lens, retina, and the optic nerve. The cornea and lens work together to focus and bend, (refract) light entering the eye to form a single focal point of an image on the retina that is then sent via the optic nerve to the brain. The overall shape of the eye and imperfections of the cornea or lens can result in refractive error. With a refractive error, instead of the focal point focusing directly on the retina, the image focal point lands in front, behind, or on multiple points of the retina resulting in a blurred image.5

A refractive error (ametropia) is a disorder that occurs when parallel rays of light entering the non-accommodating eye are not focused on the retina. There are different types of refractive errors: Myopia (nearsightedness), hyperopia (farsightedness), astigmatism (distortion due to two different focal points), and presbyopia (aging lens is unable to focus up close).

According to the American Academy of Ophthalmology (Preferred Practice Pattern Report on Refractive Errors), three quarters of Americans over the age of 40 have refractive errors greater than 0.5 diopters (D). It has been estimated that 150 million Americans currently use some form of eyewear to correct refractive errors, and of this number, 36 million use contact lenses. In 2000, nearly 1.3 million laser in situ keratomileusis (LASIK) procedures were performed in the United States. In a 2003 survey of U.S. ophthalmology surgeons, LASIK was the most commonly performed refractive surgery. Photorefractive keratectomy (PRK) and laser subepithelial keratomileusis (LASEK) are the most common alternatives to LASIK.

The term refractive surgery describes various procedures that modify the refractive error of the eye. Most of these procedures involve altering the cornea and are collectively referred to as keratorefractive surgery, refractive keratoplasty, or refractive corneal surgery. Phototherapeutic keratectomy (PTK) should not be confused with photorefractive keratectomy (PRK). Although technically the same procedure, PTK is used for the correction of particular corneal diseases, whereas PRK involves the use of the excimer laser for correction of refractive errors (e.g. myopia, hyperopia, astigmatism, and presbyopia) in persons with otherwise non-diseased corneas. Refractive surgery may be considered when a patient wishes to be less dependent on spectacles or contact lenses, or when there are occupational or cosmetic reasons not to wear spectacles. In these cases, refractive surgery is considered an elective procedure.

The most commonly performed procedures utilize the excimer laser, which was first approved for this purpose by the United States Food and Drug Administration (FDA) in 1995. Photorefractive keratectomy (PRK) was the first procedure performed; subsequently, laser in situ keratomileusis (LASIK) has become the most commonly performed keratorefractive surgery. Other keratorefractive procedures include laser epithelial keratomileusis (LASEK), insertion of intrastromal corneal ring segments (ICRS; trade name INTACS), minimally invasive radial keratotomy (mini-RK), hexagonal keratotomy, conductive keratoplasty (CK), clear lens extraction (CLE), and radial keratotomy (RK).

Refractive Surgeries

Photorefractive Keratectomy (PRK)

Definition: A type of surface ablation laser eye surgery where the corneal epithelium is removed and an excimer laser reshapes the underlying corneal stroma.

Key Points: No corneal flap is created. Longer recovery time than LASIK. Suitable for patients with thinner corneas.

Laser in situ Keratomileusis (LASIK)

Definition: A laser-assisted procedure where a corneal flap is created, the underlying stroma is reshaped with an excimer laser, and the flap is repositioned.

Key Points: Faster visual recovery than PRK. Risk of flap-related complications.

Laser Epithelial Keratomileusis (LASEK)

Definition: A hybrid of PRK and LASIK where the epithelium is loosened with alcohol, moved aside, and replaced after laser ablation.

Key Points: Preserves more corneal tissue than LASIK. Less painful than PRK but slower recovery than LASIK.

Radial Keratotomy (RK)

Definition: A non-laser procedure involving radial incisions in the cornea to flatten it and correct myopia.

Key Points: Largely obsolete. Can lead to long-term instability and fluctuating vision.

Laser Thermokeratoplasty (LTK)

Definition: Uses a holmium laser to apply heat to the peripheral cornea, causing collagen shrinkage and central corneal steepening.

Key Points: Temporary correction, mainly for hyperopia. Results often regress over time.

Phakic Intraocular Lens (IOL) Implantation

Definition: Involves implanting a synthetic lens inside the eye without removing the natural lens.

Key Points: Suitable for high refractive errors. Preserves accommodation. Requires a healthy anterior chamber.

Clear Lens Extraction (CLE) / Phakic Intraocular Lens Implantation

Definition: Removal of the eye's natural lens (even if clear) and replacement with an IOL, similar to cataract surgery.

Key Points: Used for very high refractive errors or presbyopia. Eliminates accommodation.

Intracorneal Inlays

Definition: Small devices implanted into the corneal stroma to improve near vision, typically for presbyopia.

Key Points: Preserves distance vision. Can be removed if needed.

Automated Lamellar Keratoplasty (ALK)

Definition: A mechanical microkeratome creates a corneal flap and removes a disc of stromal tissue to reshape the cornea.

Key Points: Precursor to LASIK. Less precise than laser-based methods.

Hexagonal Keratotomy

Definition: A variation of RK involving hexagonal incisions to flatten the central cornea.

Key Points: Rarely used today. Associated with unpredictable outcomes.

Conductive Keratoplasty (CK)

Definition: Uses radiofrequency energy to shrink peripheral corneal collagen, steepening the central cornea.

Key Points: Temporary correction for hyperopia or presbyopia. Non-laser, non-invasive.

Minimally Invasive Radial Keratotomy (mini-RK)

Definition: A modified RK technique using fewer and shallower incisions.

Key Points: Aimed at reducing complications of traditional RK. Still largely outdated.

IV. GUIDELINES / POSITION STATEMENTS

Medical/Professional Society	Guideline
American Academy of Ophthalmology (AAO)	Refractive Management/Intervention Summary Benchmark (AAO, December 2025)

	Refractive Errors Preferred Practice Pattern (Jacobs DS, Afshari NA et al., March 2023) Refractive Surgery Preferred Practice Pattern® (Jacobs DS, Lee JK, et al., 2023) Policy Statement on Laser Surgery (AAO, February 2025) Corneal Ectasia Preferred Practice Pattern® (Jhanji V et al., February 2024) Unapproved Lasers and Software for Refractive Surgery (AAO, February 2014)
European Society of Cataract and Refractive Surgeons (ESCRS)	Concept Version: Recommendations for Refractive Surgery (Till V et al., 2026)
The Royal College of Ophthalmologists	Professional Standards for Refractive Surgery (Allan B et al., December 2024)
Optical Confederation	Multi-Disciplinary Professional Standards for Refractive Surgery Providers and Clinical Teams (OC, June 2017)

V. REGULATORY (US FOOD AND DRUG ADMINISTRATION)

See U.S. Food & Drug Administration (FDA) Medical Device Databases for the most current information.

Device	Premarket Approval, 513(f)(2)(De Novo), or 510(k) Number	Decision date
Product Code LZS: Excimer Laser System		
MEL 80 Excimer Laser System (Carl Zeiss Meditec, Inc.)	P060004	08/11/2006
Wavelight Allegretto Wave Excimer Laser System (Alcon Laboratories, Inc.)	P030008	10/10/2003
Wavelight Allegretto Wave Excimer Laser System	P020050	10/07/2003
Technolas Excimer Laser System (Technolas Perfect Vision GmbH)	P990027	02/23/2000
VISX Excimer Laser System Model C Star	P990010	11/19/1999
Laserscan LSC Excimer Laser System	P980008	11/12/1999

EC-5000 Excimer Laser System (Nidek Co., Ltd.)	P970053	12/17/1998
Ladarvision Excimer Laser System (Alcon Laboratories)	P970043	11/02/1998
Kremer Laser System (Lasersight Technologies, Inc.)	P970005	07/30/1998
Laservision/VISX Excimer Laser Model C (Laser Vision Centers, Inc.)	P960019	11/15/1996
SVS Apex Excimer Laser System (Alcon Laboratories, Inc.)	P930034	10/20/1995
VISX Excimer Laser System Models B and C (Amo Manufacturing USA, LLC)	P930016	03/27/1996
Excimed UV200LA Laser System (Alcon Research, Ltd. Dba Alcon)	P910067	03/10/1995
VISX Model B/Model C Excimer Laser System (Amo Manufacturing USA, LLC)	P910062	09/29/1995
Product Code LQE: Implant, Corneal, Refractive		
Raindrop Near Vision Inlay (Rvo 2.0, Inc.)	P150034	06/29/2016
Kamra Inlay (Corneagen)	P120023	04/17/2015
INTACS Prescription Inserts/INTACS Corneal Implant (Addition Technology)	P980031	04/09/1999

VI. CODING

See also *Priority Health Medical Policy No. 91636 - Category III Current Procedural Terminology (CPT®) Codes ("T" codes)*

ICD-10 Codes that may support medical necessity of the following codes:

H17.9	Unspecified corneal scar and opacity
H17.89	Other corneal scars and opacities
H17.811 - H17.819	Minor opacity of cornea
H17.821 - H17.829	Peripheral opacity of cornea
H17.00 – H17.03	Adherent leukoma
H17.10 - H17.13	Central corneal opacity
H18.899	Other specified disorders of cornea, unspecified eye

A18.59	Other tuberculosis of eye
H18.40	Unspecified corneal degeneration
H18.831 - H18.839	Recurrent erosion of cornea
H18.421 - H18.429	Band keratopathy
H18.43	Other calcerous corneal degeneration
H18.441 - H18.449	Keratomalacia
H18.451 - H18.459	Nodular corneal degeneration
H18.461 - H18.469	Peripheral corneal degeneration
H18.49	Other corneal degeneration
H18.50x – H18.59x	Hereditary corneal dystrophies
Z94.7	Corneal transplant status

ICD-10 Codes that do not support medical necessity of the following procedures:
The following procedures are <u>NOT</u> covered when billed with these dx:

H52.00 - H52.03	Hypermetropia
H52.10 - H52.13	Myopia
H52.201 - H52.209	Astigmatism, Unspecified
H52.211 - H52.219	Irregular Astigmatism
H52.221- H52.229	Regular astigmatism
H52.31	Anisometropia
H52.32	Aniseikonia
H52.4	Presbyopia
H52.6	Other disorders of refraction
H52.7	Unspecified disorder of refraction
Z01.00 - Z01.01	Encounter for examination of eyes and vision

CPT/HCPCS Codes

0402T Collagen cross-linking of cornea (including removal of the corneal epithelium and intraoperative pachymetry when performed) (*Not covered for Priority Health Medicaid)*
65770 Keratoprosthesis
65772 Corneal relaxing incision for correction of surgically induced astigmatism
65775 Corneal wedge resection for correction of surgically induced astigmatism
S0812 Phototherapeutic keratectomy (PTK) *(not billable for Priority Health Medicare, not covered for Priority Health Medicaid)*
66999 Unlisted procedure, anterior segment of eye
(Explanatory notes must accompany claim)

ICD-10 Codes that apply:

H18.601 – H18.609 Keratoconus, unspecified
H18.611 – H18.619 Keratoconus, stable
H18.621 - H18.629 Keratoconus, unstable

H18.40	Unspecified corneal degeneration
Q13.4	Other congenital corneal malformations

CPT/HCPCS Codes - *This procedure covered only for the diagnoses above when criteria is met.*

65785 Implantation of intrastromal corneal ring segments

CPT/HCPCS Codes – *Not Covered:*

65760 Keratomileusis
65765 Keratophakia
65767 Epikeratoplasty
65771 Radial keratotomy
S0800 Laser in situ keratomileusis (LASIK)
S0810 Photorefractive keratectomy (PRK)

VII. MEDICAL NECESSITY REVIEW

Prior authorization for certain drugs, devices, services and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service or procedure is medically necessary. For more information, refer to the Priority Health Provider Manual.

Individual case review may allow coverage for care or treatment that is investigational yet promising for the conditions described. Requests for individual consideration require prior plan approval. All determinations of coverage for experimental, investigational, or unproven treatment will be made by a Priority Health medical director or clinical pharmacist. The exclusion of coverage for experimental, investigational, or unproven treatment may be reviewed for exception if the condition is either a terminal illness, or a chronic, life threatening, severely disabling disease that is causing serious clinical deterioration.

VIII. APPLICATION TO PRODUCTS

Coverage is subject to the member's specific benefits. Group-specific policy will supersede this policy when applicable.

- **HMO/EPO**: This policy applies to insured HMO/EPO plans.
- **POS**: This policy applies to insured POS plans.
- **PPO**: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- **ASO**: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- **INDIVIDUAL**: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.

- **MEDICARE**: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS); if a coverage determination has not been adopted by CMS, this policy applies.
- **MEDICAID/HEALTHY MICHIGAN PLAN**: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual, the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

IX. REFERENCES

Guidelines

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SUMMARY OF CHANGES

Additions:

- Scope
- Related Policies
- GUIDELINES / POSITION STATEMENTS
- REGULATORY (US FOOD AND DRUG ADMINISTRATION)

Changes:

- Transferred policy to enhanced template.

Past committee review dates: 07/2007, 06/2008, 06/2009, 06/2010, 08/2010, 08/2011, 08/2012, 08/2013, 08/2014, 08/2015, 08/2016, 08/2017, 08/2018, 08/2019, 08/2020, 08/2021, 08/2022, 08/2023, 08/2024, 08/2025

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