

Medical Policy



Refractive Surgery

Policy Number: PG0289
Last Review: 12/01/2024

HMO AND PPO
ELITE (MEDICARE ADVANTAGE)
MARKETPLACE

GUIDELINES:

- This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder terms, conditions, exclusions, and limitations contract. It does not constitute a contract or guarantee regarding coverage or reimbursement/payment. Self-Insured group specific policy will supersede this general policy when group supplementary plan document or individual plan decision directs otherwise.
- Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards.
- This medical policy is solely for guiding medical necessity and explaining correct procedure reporting used to assist in making coverage decisions and administering benefits.

SCOPE:

☒ Professional
☐ Facility

DESCRIPTION:

Refractive surgery involves surgery performed to reshape the cornea of the eye. Refraction is the bending of light rays as they move from one transparent medium to another medium of a different density and is measured in diopters. The cornea, along with the lens, refracts light that enters the eye, which is largely responsible for the eye's focusing power. The main types of refractive errors are myopia (nearsightedness), hyperopia (farsightedness) and astigmatism (distortion). The goals of refractive surgery are to reduce or eliminate refractive error, attain normal vision, and reduce or eliminate the need for glasses or contact lenses for distant vision through the incision or excision of corneal tissue by a surgical instrument. Refractive keratoplasty is a generic term, which includes all surgical procedures on the cornea to improve vision by changing the refractive index of the corneal surface, although they involve different surgical methods.

Radial Keratotomy (RK) is a surgical procedure for nearsightedness. Using a high-powered microscope, the physician places micro-incisions (usually 8 or fewer) on the surface of the cornea in a pattern much like the spokes of a wheel. The incisions are very precise in terms of depth, length, and arrangement. The micro-incisions allow the central cornea to flatten, thus reducing the convexity of the cornea, which produces an improvement in vision.

Astigmatic Keratotomy (AK) (arcuate incision, corneal wedge resection) is a refractive surgical procedure similar to RK that is used to reduce astigmatism. Instead of radial incisions, a curvilinear pattern is used to smooth the areas of the cornea that are too steeply curved. In some instances, surgeons have combined RK with AK in patients with myopia with astigmatism. Variations of astigmatic keratotomy include the Ruiz Procedure and the Troutman Wedge Resection. Astigmatic keratotomy may be indicated for the correction of surgically induced astigmatism following medically indicated cataract removal or corneal transplant surgery. Astigmatic keratotomy has not been proven for treatment of other refractive errors.

Phototherapeutic Keratectomy (PTK) uses the excimer laser to treat visual impairment or irritative symptoms relating to diseases of the anterior cornea by sequentially ablating uniformly thin layers of corneal tissue. PTK should not be confused with photorefractive keratectomy (PRK). Although technically they are the same procedure, PTK is used for the correction of particular corneal diseases. PRK involves use of the excimer laser for correction of refractive errors in persons with otherwise non-diseased corneas.

Laser-assisted in-situ Keratomileusis (LASIK) is a procedure that permanently changes the shape of the cornea. An excimer laser and microkeratome are combined for vision correction; the microkeratome is used to shave a thin slice and create a hinged flap in the cornea, the flap is reflected back, the exposed cornea is reshaped by the laser, and the flap is replaced, without sutures, to heal back into position.

Photorefractive Keratectomy (PRK) uses a computerized laser to reshape the central cornea to a flattened shape for people who are myopic and a more curved surface for people who are hyperopic. Photo-refractive Keratectomy techniques may also be used to correct astigmatism (Photoastigmatic keratectomy or PRK-A). The excimer laser is well-suited for cornea reshaping, because the removal of just tiny amounts of tissue can produce the results needed to correct refractive errors. The excimer laser produces a beam of ultraviolet light in pulses that last only a few billionths of a second. Each pulse removes a microscopic amount of tissue by evaporating it, producing very little heat, and usually leaving underlying tissue almost untouched. Overall, the surgery takes approximately 10-20 minutes; however, the use of the laser beams lasts only 15-40 seconds.

Conductive Keratoplasty (CK) is a refractive surgery procedure for hyperopia and astigmatism that uses a probe to apply high frequency radio waves into the corneal tissue, causing shrinkage. This controlled shrinkage will reshape the cornea to accommodate refractive error.

Laser Thermal Keratoplasty (LTK) uses a noncontact laser (Holmium laser) that is used to shrink the peripheral area of the cornea. This makes the shape of the cornea steeper and corrects mild to moderate cases of farsightedness. The laser works when moisture in the cornea absorbs energy from the laser pulses, causing corneal tissue to heat up and shrink. The application of energy is accomplished without physically contacting the cornea with instrumentation or other apparatus.

Automated Lamellar Keratoplasty (ALK) can correct hyperopia (farsightedness). For the treatment of moderate far-sightedness, the cornea is opened across the top to form a type of “cap”, using an automated instrument. When the “cap” is positioned back into its original location on the top of the eye, microscopic scar tissue is formed, causing the “cap” to bulge out. This corrects the overly flattened cornea that is associated with farsightedness. Almost like Velcro, the cornea and the cap adhere to each other, eliminating the need for sutures. Normally one eye is treated at a time, with about 3-4 weeks allowed between each eye surgery. To ease any discomfort, the eye is anesthetized with special drops, and the patient is given a mild sedative to remain relaxed and unaware throughout the procedure.

Hexagonal Keratotomy is a form of refractive corneal surgery used to treat naturally occurring far-sightedness and presbyopia (loss of accommodation in the eyes in advancing age) following radial keratotomy. A hexagonal pattern of intersecting incisions in the cornea is used in performing this procedure.

Laser-assisted sub-epithelial keratomileusis (LASEK) is the detachment of the epithelium with the use of an alcohol solution that softens the epithelium and allows it to be rolled back into a flap. The flap of epithelium is then repositioned over the cornea following excimer ablations. LASEK is a recent modification of PRK that attempts to preserve the epithelium.

Minimally Invasive Radial Keratotomy (mini-RK) is intended in cases of nearsightedness to alter the cornea's shape and consequently the refraction by reducing the millimeters of cornea that are incised.

Intrastromal Corneal Ring Segments (INTACS)

This procedure involves inserting a flexible ring beneath the surface of the cornea to elevate the edge of the cornea to flatten the front of the eye, decreasing nearsightedness. Different size rings are used to correct different degrees of nearsightedness. Intrastromal corneal ring segments have been investigated for two indications—as a refractive procedure to correct mild myopia and as a treatment of keratoconus.

Small-incision lenticule extraction (SMILE): This is an alternative to flap-based procedures. It is a minimally invasive technique using a femtosecond laser and involves creating a refractive lenticule in the corneal stroma and mechanically removing it through a small peripheral incision.

Orthokeratology (Ortho-K) involves the application of sequentially flatter hard contact lenses to flatten the cornea and, thereby, reduce myopic refractive error. Unlike traditional contact lenses, the lenses involved in Ortho-K do not refract like glasses do, but only serve to alter the shape of the cornea to achieve normal vision.

Clear lens extraction (CLE) is a surgical procedure in which the non-cataractous crystalline lens is removed and replaced with an intraocular lens for refractive purposes.

Epikeratoplasty (or Epikeratophakia) involves placement of a precarved donor corneal lens on the surface of a patient's eye. Epikeratophakia may be considered for the treatment of childhood aphakia because contact lenses are difficult for children to use, and intraocular lens implants may result in long-term complications in children. This procedure may be used on scarred corneas and corneas affected with endothelial dystrophy. Epikeratophakia may also be considered acceptable in cases of adult aphakia when the secondary implantation of an intraocular lens might affect outcome (e.g., history of uveitis, significant corneal endothelial disease, and gross corneal irregularity after trauma).

Keratomileusis involves removing, freezing and lathing the patient's cornea, followed by its replacement onto the corneal bed. This surgery has been proposed for myopia and aphakic hyperopia.

Keratophakia is a procedure in which the patient's cornea is removed followed by placement of a frozen, shaped donor cornea beneath the recipient's cornea, which is then reattached. The technique has been proposed for aphakic hyperopia.

POLICY:

Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans

- **Procedures 65760, 65765, 65771, 65785 (INTACS) require a prior authorization**
 - 65760, 65762, 65771 per InterQual coverage criteria
 - 65785 per the Medical Policy coverage criteria indicated below
- **Procedure codes 65767, 65772, & 65775 do not require prior authorization when the coverage criteria below are met**
- **Procedure code V2599 is non-covered (vision benefit when applicable)**

COVERAGE CRITERIA:

Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans

Refractive procedures mentioned in this policy may be considered not medically necessary and/or cosmetic when used 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). Refractive surgical procedures are considered to be not medically necessary because spectacles or contact lenses have been shown to provide more accurate corrections of refractive errors than refractive surgery. Although the efficacy of refractive surgery is improving, the accuracy and precision of the refractive corrections achieved is substantially less than that which can be achieved with spectacle correction. These exclusions may apply to radial keratotomy (RK), astigmatic keratotomy, photorefractive keratectomy (PRK), phototherapeutic keratectomy (PTK), laser-in-situ keratomileusis (LASIK), keratomileusis, epikeratophakia, implantation of intrastromal corneal ring segments, and any other refractive surgical procedures considered not medically necessary and/or cosmetic.

Individual contract language will apply.

If coverage is available for services for or related to surgical treatment of refractive errors, the following conditions of coverage apply.

Corneal Relaxing/Corneal Wedge Resection

Paramount covers corneal relaxing incision (65772) or corneal wedge resection (65775) when ALL the following

PG0289-12/01/2024

criteria are met:

- The astigmatism is the result of a previous cataract surgery, medically necessary refractive surgery, scleral buckling for retinal detachment, or corneal transplant; and
- The degree of astigmatism must be 3.00 diopters or greater; and
- The member must be intolerant of glasses, contact lenses, or contact lenses and glasses.

Paramount does not cover a corneal relaxing incision (65772) or corneal wedge resection (65775) (i.e., astigmatic keratotomy [AK]) for any other indication because they are considered not medically necessary.

Paramount does not cover radial keratotomy (RK) because this is considered not medically necessary for the treatment of myopia ranging from -2.00 to -8.00 diopters, refractive error can be corrected satisfactorily with eyeglasses or contact lenses.

Epikeratoplasty

Paramount covers epikeratoplasty (65767) as medically necessary for EITHER of the following indications:

- Acquired or congenital aphakia; or
- Hypermetropia following cataract surgery in patients unable to receive intraocular lens; or
- For the treatment of scarred corneas and corneas affected with endothelial dystrophy

Paramount does not cover epikeratoplasty (65767) for any other indication because it is considered experimental/investigational.

Phototherapeutic Keratectomy (PTK)

Paramount covers phototherapeutic keratectomy (PTK) as medically necessary for ANY of the following indications:

- Superficial corneal dystrophy (including granular, lattice and Reis-Bückler's dystrophy); or
- Epithelial membrane dystrophy; or
- Irregular corneal surfaces due to Salzmann's nodular degeneration or keratoconus nodule; or
- Corneal scars and opacities, including post-traumatic, postinfectious, postsurgical, and secondary to pathology; or
- Recurrent corneal erosions when more conservative measures (e.g., lubricants, hypertonic saline, patching, bandage contact lenses, gentle debridement of severely aberrant epithelium) have failed to halt the erosions.

Paramount does not cover phototherapeutic keratectomy (PTK) for any other indication because it is considered not medically necessary, including, but not limited to, infectious keratitis.

Laser In Situ Keratomileusis (LASIK), Laser epithelial keratomileusis (LASEK) & Photorefractive Keratectomy (PRK)

Paramount covers LASIK, LASEK and PRK as medically necessary when ALL the following criteria are met:

- Prior cataract, corneal, or scleral buckling surgery for retinal detachment has been performed on this eye; and
- There is a diagnosis due to aniseikonia (different sizes of ocular images) or anisometropia (difference in power of refraction); and
- The degree of astigmatism and/or anisometropia must be 3.00 diopters or greater; and
- The member must be intolerant of glasses, contact lenses, or contact lenses and glasses.

Paramount does not cover laser in situ keratomileusis (LASIK), laser epithelial keratomileusis (LASEK), or photorefractive keratectomy (PRK) for any other indication because they are considered not medically necessary.

Small incision lenticule extraction (SMILE)

Paramount covers SMILE as medically necessary when ALL the following criteria are met:

- Prior cataract, corneal, or scleral buckling surgery for retinal detachment has been performed on this eye;

and

- There is a diagnosis due to aniseikonia (different sizes of ocular images) or anisometropia (difference in power of refraction); and
- The member must be intolerant of glasses, contact lenses, or contact lenses and glasses; and
- The post-operative spherical equivalent refractive error has changed by 3 diopters when compared to the preoperative refractive error; and the following refractive error exists:
 - Spherical refractive error (in minus cylinder format): from -1.00 diopters through -10.00 diopters; and
 - Cylinder (when astigmatism is present): from -0.75 diopters through -3.00 diopters; and
 - Refraction spherical equivalent: less than or equal to 10.00 diopters.

Paramount does not cover small incision lenticule extraction (SMILE) for any other indication because they are considered not medically necessary.

Intrastromal Corneal Ring Segments (INTACS)

INTACS (CPT Code 65785) is considered medically necessary and eligible for reimbursement providing that all of the following medical criteria are met:

- Age > 21 years; and
- Myopia and astigmatism due to keratoconus; and
- Progressive deterioration of vision; and
- Inability to perform activities of daily living due to keratoconus-induced visual impairment; and
- Eyeglasses and contact lenses are no longer able to correct vision to 20/40 or better; and
- Central cornea is clear; and
- Intrastromal corneal ring segments would improve vision and reduce or eliminate myopia and astigmatism; and
- Corneal thickness > 450 microns at the proposed incision site; and
- Implantation will delay or eliminate the need for corneal transplantation.

ALL other clinical conditions, including vision correction due to myopia, investigational and not eligible for reimbursement. Paramount does not cover implantation of intrastromal corneal ring segments for any other indication because it is considered experimental/investigational, including, but not limited to, pellucid marginal degeneration.

Non-covered

Paramount does not cover ANY of the following refractive procedures because they are considered not medically necessary and/or experimental/investigational (this list may not be all-inclusive):

- conductive keratoplasty
- clear lens extraction (CLE) with or without implantation of an accommodating or nonaccommodating lens
- lamellar keratoplasty (non-penetrating keratoplasty)
- laser thermal keratoplasty (LTK)
- limbal relaxing incisions for non-surgically induced astigmatism
- penetrating keratoplasty (PK) (corneal transplantation, perforating keratoplasty)
- radial keratotomy for the treatment of all refractive errors (65771)
- automated lamellar keratomileusis (ALK) (i.e., standard keratomileusis) for the treatment of all refractive errors (65760)
- corneal inlay
- hexagonal keratotomy in all cases
- keratophakia for the correction of all refractive errors (65765)
- corneal relaxing/corneal wedge resection, except for the small subset as indicated above
- laser epithelial keratomileusis (LASEK), except for the small subset as indicated above
- laser in-situ keratomileusis (LASIK), except for the small subset of individuals noted above
- photorefractive keratectomy (PRK), except for the small subset of individuals noted above

- epikeratoplasty (epikeratophakia), except for the small subset of individuals as noted above
- small incision lenticule extraction (SMILE) except for the small subset of individuals noted above
- minimally-invasive radial keratotomy (mini-RK) in all cases
- orthokeratology in all cases (V2599)
- scleral expansion surgery

CODING/BILLING INFORMATION:

The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

CPT CODES	
65710	Keratoplasty (corneal transplant); anterior lamellar
65730	Keratoplasty (corneal transplant); penetrating (except in aphakia or pseudophakia)
65750	Keratoplasty (corneal transplant); penetration (in aphakia)
65755	Keratoplasty (corneal transplant); penetration (in pseudophakia)
65760	Keratomeleusis
65765	Keratophakia
65767	Epikeratoplasty
65771	Radial keratotomy (RK)
65772	Corneal relaxing incision for correction of surgically induced astigmatism
65775	Corneal wedge resection for correction of surgically induced astigmatism
65785	Implantation of intrastromal corneal ring segments
66999	Unlisted procedure, anterior segment of eye (Not covered when utilized for one of the noncovered procedures indicated above)
HCPCS CODES	
V2599	Contact lens, other type

REVISION HISTORY EXPLANATION: ORIGINAL EFFECTIVE DATE: 02/15/2010

Date	Explanation & Changes
07/01/2011	<ul style="list-style-type: none"> • No changes
04/14/2015	<ul style="list-style-type: none"> • Changed title from Refractive Vision Services (Laser-in-situ Keratomileusis – Lasik, Astigmatic Keratotomy – AK, Radial Keratotomy – RK, Photorefractive Keratectomy – PRK, Phototherapeutic Keratectomy -PTK) to Refractive Surgery • Removed code 92015 (PG0331 Refractive Vision Services) and added 65767, 65772, 65775 & 66999 • Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee
01/10/2017	<ul style="list-style-type: none"> • Code 65765 is now covered without prior authorization for Advantage only per ODM guidelines • Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee
12/18/2020	<ul style="list-style-type: none"> • Medical policy placed on the new Paramount Medical Policy Format
02/17/2023	<ul style="list-style-type: none"> • Medical Policy updated to reflect Medicaid coverage to Anthem as of 02/01/2023
06/01/2023	<ul style="list-style-type: none"> • Medical Policy reviewed and updated to reflect the most current clinical evidence. • Coverage criteria updated. • Added Intrastromal Corneal Ring Segments (INTACS) (combined this policy with medical policy PG0174)
03/07/2024	<ul style="list-style-type: none"> • Medical policy placed on the new Paramount Medical Policy Format
12/01/2024	<ul style="list-style-type: none"> • Medical Policy reviewed and updated to reflect the most current clinical evidence • Coverage criteria maintained

- Procedure 65785 prior authorization maintained for Intrastromal Corneal Ring Segments – Keratoconus per the medical policy coverage criteria (aligns with Medical Mutuals prior authorization coverage criteria)
- Procedures 65760, 65765 and 65771 changed from noncovered to covered with a prior authorization per InterQual coverage criteria
- Removed S-codes, S0800, S0810, S0812, as Paramount does not recognize or reimbursement of S-codes

Paramount reserves the right to review and revise our policies periodically when necessary. When there is an update, we will publish the most current policy to

<https://www.paramounthealthcare.com/providers/medical-policies/policy-library>

REFERENCES/RESOURCES

Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals> <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs>

National Physician Fee Schedule Relative Value File Calendar Year XXXX, Centers for Medicare & Medicaid Services (CMS) <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Relative-Value-Files>

NCCI Policy Manual for Medicare Services, current version, Chapter 1, General Correct Coding Policies <https://www.cms.gov/files/document/medicare-ncci-policy-manual-2023-chapter-1.pdf>

American Medical Association, *Current Procedural Terminology (CPT®)* and associated publications and services <https://www.ama-assn.org/amaone/cpt-current-procedural-terminology>

Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets <https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/HCPCS-Quarterly-Update>

Centers for Medicare & Medicaid Services (CMS), ICD-10-CM Official Guidelines for Coding and Reporting <https://www.cms.gov/medicare/coding/icd10>

Centers of Medicare & Medicaid Services (CMS), Medicare Claims Processing Manual, Chapter 23-Fee Schedule administration and coding Requirements <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c23.pdf>

Centers for Medicare & Medicaid Services (CMS), National Correct Coding Initiative (NCCI) Policy Manual for Medicare Services <https://www.cms.gov/medicare-medicare-coordination/national-correct-coding-initiative-ncci/ncci-medicare>

Center for Medicare and Medicaid Services, Medicare NCCI Medically Unlikely Edits (MUEs) <https://www.cms.gov/medicare/coding-billing/national-correct-coding-initiative-ncci-edits/medically-unlikely-edits>
U.S. Preventive Services Task Force, <https://www.uspreventiveservicestaskforce.org/uspstf/>

Hayes, Inc., <https://www.hayesinc.com/>

Industry Standard Review