

Corneal remodeling, Corneal Keratectomy, Keratoplasties and Keratoprosthesis

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Effective Date	8/2007
Next Review Date	8/15/2024
Coverage Policy	Surgical 55
Version	5

Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details [*](#).

Purpose:

This policy addresses Corneal remodeling, Corneal Keratectomy, Keratoplasties and Keratoprosthesis.

Description & Definitions:

Anterior Lamellar Keratoplasty (ALK) corneal transplant that replaces a partial-thickness of the cornea without removing the endothelium layer.

Corneal Remodeling is a surgical procedure to correct refractive errors such as Photorefractive Keratectomy (PRK) is a laser treatment to reshape the cornea for refractory errors and vision that cause myopia (nearsightedness), hyperopia (farsightedness) and astigmatism.

Endothelial keratoplasty (EK) also known as Partial corneal transplant is a surgery to replace this layer of the cornea called "endothelium" with healthy tissue. Two types DSEK (or DSAEK) — Descemet's Stripping (Automated) Endothelial Keratoplasty and DMEK — Descemet's Membrane Endothelial Keratoplasty.

Keratoprosthesis procedure is an artificial cornea implant (the clear tissue that covers the eyeball) to correct refractive errors of vision such as near- and farsightedness and difficulty focusing. The physician creates a new anterior chamber with a plastic optical implant that replaces a severely damaged cornea that cannot be repaired. Sometimes the corneal prosthesis is sutured to the sclera; other times, extensive damage to the eye requires the implant be sutured to the closed and incised eyelid.

Penetrating keratoplasty (PK) corneal transplant that replaces the full thickness of the cornea.

Phototherapeutic keratectomy (PTK) is a laser treatment to ablate corneal tissue to reshape the corneal surface using a less invasive technique.

Criteria:

Corneal remodeling, Corneal Keratectomy, Keratoplasties and Keratoprosthesis are considered medically necessary for indications of **1 or more** of the following:

- **Phototherapeutic keratectomy (PTK)** for individuals with **1 or more** of the following:
 - Superficial corneal dystrophy (including granular, lattice, and Reis-Buckler's dystrophy)
 - Epithelial membrane dystrophy
 - Irregular corneal surfaces due to Salzmann's nodular degeneration or keratoconus nodules
 - Corneal scars and opacities (including post-traumatic, post-infectious, post-surgical, and secondary to pathology)
 - Recurrent corneal erosions when more conservative measures have failed to halt the erosions (including but not limited to lubricants, hypertonic saline, patching, bandage contact lenses, gentle debridement of the epithelium)
- **Endothelial keratoplasty** for individuals with **ALL** of the following:
 - Endothelial failure with **1 or more** of the following:
 - Descemet's stripping endothelial keratoplasty (DSEK)
 - Descemet's stripping automated endothelial keratoplasty (DSAEK)
 - Descemet's membrane endothelial keratoplasty (DMEK)
 - Descemet's membrane automated endothelial keratoplasty (DMAEK)
 - Diagnoses including **1 or more** of the following:
 - Corneal edema
 - Bullous keratopathy
 - Rupture of Descemet's membrane
 - Endothelial corneal dystrophy and other posterior corneal dystrophies
 - Mechanical complications due to corneal graft or ocular lens prostheses
- **Corneal remodeling** correction of surgically induced astigmatism for individuals with **ALL** of the following:
 - Corneal relaxing incision or corneal wedge resection with **1 or more** of the following:
 - Individual has had previous penetrating keratoplasty within past 60 months
 - Individual has had cataract surgery within the past 36 months
 - Degree of astigmatism must be 3.00 diopters or greater
 - Individual is intolerant of glasses or contact lenses
- **Penetrating keratoplasty, Intralase-Enabled Keratoplasty (IEK) and anterior lamellar keratoplasty** are considered medically necessary for individuals with indications of **1 or more** of the following:
 - Procedure is to improve poor visual acuity caused by an opaque cornea or keratopathy
 - Procedure is to treat or remove active corneal disease for, including but not limited to:
 - Bullous/dystrophic keratopathy
 - Chemical injuries
 - Corneal degeneration
 - Corneal dystrophies
 - Corneal edema
 - Corneal scar with opacity
 - Corneal transplant rejection
 - Corneal tumors, such as pterygium
 - Ectasias
 - Fuch's dystrophy
 - Herpes simplex keratitis
 - Keratoconus
 - Mechanical trauma
 - Microbial keratitis including fungal and bacterial keratitis
 - Noninfectious ulcerative keratitis
 - Regraft related to allograft rejection
 - Regraft unrelated to allograft rejection
 - Scarring after infectious keratitis

- Viral keratitis
 - Failure of a previous keratoplasty
 - Intralase-Enabled Keratoplasty (IEK) also known as laser assisted corneal transplant as an additional method of penetrating keratoplasty instead of the traditional trephine (a specialized circular blade) to remove piece of cornea a laser is used.)
- **Keratoprosthesis** (i.e KPro) device is considered medically necessary for **1 or more of the following**:
 - Corneal blindness
 - Severely opaque and vascularized cornea; and
 - Two or more failed corneal transplant procedures.

Lamellar keratoplasty and penetrating keratoplasty is considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- Acute conjunctivitis
- Advanced ocular surface disease
- Anterior staphyloma
- Blepharitis
- Episcleritis
- Meibomian gland disease
- Retinal detachment
- Severe dry eye
- Steven Johnson syndrome
- Toxic epidermal necrolysis

Lamellar keratoplasty (non-penetrating keratoplasty) is considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- For pterygium or
- when performed improvement in visual acuity to solely to correct astigmatism or
- other refractive errors.

Penetrating keratoplasty is considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- when performed solely to correct astigmatism or
- other refractive errors

Keratoprosthesis is considered **not medically necessary** for any use other than those indicated in clinical criteria.

Coding:

Medically necessary with criteria:

Coding	Description
65756	Keratoplasty (corneal transplant); endothelial
65757	Backbench preparation of corneal endothelial allograft prior to transplantation (List separately in addition to code for primary procedure)

65772	Corneal relaxing incision for correction of surgically induced astigmatism
65775	Corneal wedge resection for correction of surgically induced astigmatism
S0810	Photorefractive keratectomy (PRK)
S0812	Phototherapeutic keratectomy (PTK)
65710	Keratoplasty (corneal transplant); anterior lamellar
65730	Keratoplasty (corneal transplant); penetrating (except in aphakia or pseudophakia)
65750	Keratoplasty (corneal transplant); penetrating (in aphakia)
65755	Keratoplasty (corneal transplant); penetrating (in pseudophakia)
66999	Unlisted procedure, anterior segment of eye
58353	Endometrial ablation, thermal, without hysteroscopic guidance
65770	Keratoprosthesis
L8609	Artificial cornea

Considered Not Medically Necessary:

Coding	Description
S0810	Photorefractive keratectomy (PRK)

U.S. Food and Drug Administration (FDA) - approved only products only.

Document History:

Revised Dates:

- 2023: August
- 2022: July
- 2019: October
- 2009: April
- 2008: April

Reviewed Dates:

- 2022: 2023: July
- 2021: September
- 2020: September
- 2019: September

- 2018: April
- 2016: April
- 2015: April
- 2014: April
- 2013: April
- 2012: April
- 2011: May
- 2010: April

Effective Date:

- August 2007

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Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

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<https://www.dmas.virginia.gov/for-providers/cardinal-care-transition/>

Special Notes: *

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving, and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

Services mean both medical and behavioral health (mental health) services and supplies unless We specifically tell You otherwise. We do not cover any services that are not listed in the Covered Services section unless required to be covered under state or federal laws and regulations. We do not cover any services that are not Medically Necessary. We sometimes give examples of specific services that are not covered but that does not mean that other similar services are covered. Some services are covered only if We authorize them. When We say You or Your We mean You and any of Your family members covered under the Plan. Call Member Services if You have questions.

Keywords:

Phototherapeutic Keratectomy, Endothelial Keratoplasty, Corneal Remodeling, Corneal Surgery, SHP Surgical 55, PTK, Superficial corneal dystrophy, granular, lattice, Reis-Buckler's dystrophy, Epithelial membrane dystrophy, Salzmann's nodular degeneration, kertonconus nodules, Corneal scars, corneal opacities, corneal transplant, astigmatism, Descemet's stripping endothelial keratoplasty, DSEK, Descemet's stripping automated endothelial keratoplasty, DSAEK, Descemet's membrane endothelial keratoplasty, DLEK, Descemet's membrane, Bullous keratopathy, Corneal edema, Endothelial corneal dystrophy, corneal graft, ocular lens prostheses, excimer laser-based surgical procedure, corneal wedge resection, Descemet membrane endothelial keratoplasty, DMEK