Keystone First
Family of Health Plans

Therapeutic Contact Lenses

Clinical Policy ID: CCP.1077

Recent review date: 2/2026

Next review date: 6/2027

Policy contains: Amniotic membrane transplantation; Boston scleral lens; Hydrophilic contact lens for corneal bandage; Scleral shell lens

Keystone First VIP Choice has developed clinical policies to assist with making coverage determinations. Keystone First VIP Choice's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by Keystone First VIP Choice, on a case by case basis, when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. Keystone First VIP Choice's clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. Keystone First VIP Choice's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, Keystone First VIP Choice will update its clinical policies as necessary. Keystone First VIP Choice's clinical policies are not guarantees of payment.

Coverage policy

The use of therapeutic contact lenses is clinically proven and, therefore, may be medically necessary when all of the following criteria are met (American Academy of Ophthalmology, 2024; Jones, 2025; Lim, 2020; Watson, 2018):

- Use of any of the following lens types:
  - Contact lenses placed after cataract surgery, as they are considered prostheses unless otherwise specified by the member's benefit plan.
  - Hydrophilic soft contact lenses or gas-permeable fluid ventilated scleral lenses, when used in the management of severe corneal disease.
  - Boston scleral lens when used as a moist corneal bandage if lubricants or drops are not appropriate.
  - Scleral cover shell for the treatment of severe keratoconjunctivitis sicca and/or when the orbit requires greater support because of the loss of corneal strength.

- Correction of any of the following functional impairments:
    - Not able to achieve vision of 20/40 or better, despite best correction with eyeglasses or typical contact lenses.
    - Lenses will delay/prevent the need for corneal transplantation.
    - Will improve performance of activities of daily living.

Amniotic membrane transplantation is clinically proven and, therefore, may be medically necessary on a case-by-case basis for circumstances where there is a condition requiring acute treatment, such as (Clare, 2012; Clare, 2022; Zhao, 2015):

- Chemical or thermal injuries.
- Limbal stem cell failure.

Limitations

All other uses of therapeutic contact lenses are not medically necessary.

Contact lenses for vision correction are subject to benefit plans of the individual member.

The use of contact lenses for treatment of visual perceptual dysfunction, such as dyslexia, is not clinically proven, there for not medically necessary.

Alternative covered services

- Physician office visits.
- Standard covered ocular surgery.
- Standard medical management of corneal disease.

Background

Therapeutic contact lenses are designed to manage other ocular pathology beyond simple refractive disorders. There are several types of therapeutic lenses available for the management of these disorders, consisting of (Gromacki, 2012):

- The corneal liquid bandage lens may be rigid gas permeable scleral contact lenses or a therapeutic contact lens. They are used to treat acute or chronic corneal disease. These lenses protect the cornea from the drying effects of air and may reduce pain and photophobia. Because such lenses cover the entire cornea with a smooth surface, they may improve vision that results from acute astigmatism.
- The Boston scleral lens was developed through the Boston Foundation for Sight. It is a specially designed fluid-ventilated, gas-permeable contact lens. The design allows a bubble-free reservoir of oxygenated aqueous fluid to cover the corneal surface, at a neutral hydrostatic pressure. This design makes it well suited for severe corneal diseases.
- The scleral shell contact lens covers the entire exposed surface of the eye. For individuals with severe dry eye, such as keratoconjunctivitis, the scleral shell lens can hold artificial tears that have been dropped into the eye. These lenses protect the eye against further drying. The scleral shell also allows support and protection when severe corneal disease has rendered the person blind. Use of the scleral shell may prevent enucleation by providing support for the rest of the eye.
- Amniotic membrane transplantation is performed in cases of severe thermal or chemical burns to the cornea to reduce pain and accelerate healing.

Findings

The evidence base for therapeutic contact lenses consists of professional guidelines, systematic reviews, meta-analyses, and observational studies. Clinical guidelines from the American Academy of Ophthalmology and international consensus bodies support therapeutic contact lens use for severe corneal disease, dry eye, and related conditions. Systematic reviews demonstrate clinical utility for specific indications, though most primary studies are single-site with relatively small sample sizes, and head-to-head comparisons between lens modalities remain limited. Evidence for amniotic membrane transplantation supports its use in moderate ocular surface burns, with less consistent benefit demonstrated in severe burns.

Clinical guidelines

There is consensus that patients with corneal pathology that threatens to weaken the architecture of the eye should be treated with appropriate medical therapy and/or supporting contact lenses. Therapeutic contact lenses may be used for selected corneal and ocular surface disorders.

The 2025 Tear Film and Ocular Surface Society Dry Eye Workshop III Management and Therapy report provides an evidence-based review of current strategies to manage dry eye disease (Jones, 2025).

Systematic reviews

A review of the professional literature lists pain relief, enhancement of corneal healing, corneal sealing, corneal protection, and drug delivery as indications for use of therapeutic contact lenses. Associated conditions and procedures include painful corneal diseases such as keratopathy, keratectomy, severe dry eye, post-amniotic membrane transplant, sealing corneal perforations, corneal protection from eyelid conditions, and maintaining therapeutic concentrations during ocular drug delivery (Lim, 2020).

In a systematic review of surgical treatments for corneal shield ulcers in vernal keratoconjunctivitis, debridement with or without amniotic membrane transplantation was among the described approaches, and most patients experienced resolution or improvement with recurrence reported in a subset (Azizi, 2023).

A systematic review of amniotic membrane grafting for acute chemical and thermal ocular surface burns identified nine included studies and concluded that amniotic membrane grafting improved corneal re-epithelialization in moderate-grade burns but showed no advantage in severe burns and no significant advantage for visual acuity or corneal clarity in either moderate or severe burns (Veldman, 2025).

Evidence for amniotic membrane transplantation in acute ocular surface burns is uncertain for moderate burns and does not indicate significant benefit for severe burns (Clare, 2012; Clare, 2022).

Meta-analyses

A 2025 systematic review of scleral lenses for keratoconus (five studies, 463 eyes) found substantial improvements in visual acuity, with baseline logarithm of the minimum angle of resolution scores of 0.50 to 0.53 improving to post-treatment scores of 0.08 to 0.09 (Mushtaq, 2025). Quality of life improved in vision-related assessments. However, the evidence was limited by methodological shortcomings and a lack of long-term controlled studies.

Other evidence

A detailed review presents information on new developments in drug-eluting ophthalmic lenses that sustain drug delivery to the eye in treating various ophthalmologic conditions (Toffoletto, 2021).

A survey of patients (n = 639) with dry eye disease using therapeutic contact lenses found a large proportion reported mid-day fogging or clouding of vision (75% for scleral lenses, 62% for soft lenses). Large proportions (72% and 43%) of wearers of these lenses spent over 20 minutes per day on dry eye management (Shorter, 2023).

In 2026, we reorganized the findings section thematically and incorporated additional evidence including the Tear Film and Ocular Surface Society Dry Eye Workshop III Management and Therapy report (Jones, 2025), a systematic review with meta-analysis of scleral lenses for keratoconus (Mushtaq, 2025), and the 2022 Cochrane update on amniotic membrane transplantation for acute ocular burns (Clare, 2022).

References

On January 18, 2026, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “Contact Lenses/therapeutic use”(MeSH), “Contact Lenses, Extended-Wear/therapeutic use”(MeSH), “therapeutic contact lenses,” and “amniotic membrane.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

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Policy updates

12/2013: initial review date and clinical policy effective date: 6/2014

11/2016: Policy references updated.

11/2017: Policy references updated.

1/2018: Policy references updated.

10/2018: Policy references updated.

11/2019: Policy references updated.

2/2021: Policy references updated.

2/2022: Policy references updated.

2/2023: Policy references updated; no new references added.

2/2024: Policy references updated.

2/2025: Policy references updated.

2/2026: Policy references updated.

Related Codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy CCP.1077. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill

accordingly. Coverage is limited to services/items that meet the criteria and limitations described in this policy, including that routine vision correction is subject to the member's benefit plan.

CPT Codes: Contact Lens Services	
Code	**Code Description**
92071	Fitting of contact lens for treatment of ocular surface disease
92072	Fitting of contact lens for management of keratoconus, initial fitting
92310	Prescription of optical and physical characteristics of and fitting of contact lens, with medical supervision of adaptation; corneal lens, both eyes, except for aphakia
92311	Prescription of optical and physical characteristics of and fitting of contact lens, with medical supervision of adaptation; corneal lens for aphakia, one eye
92312	Prescription of optical and physical characteristics of and fitting of contact lens, with medical supervision of adaptation; corneal lens for aphakia, both eyes
92313	Prescription of optical and physical characteristics of and fitting of contact lens, with medical supervision of adaptation; corneoscleral lens
92325	Modification of contact lens (separate procedure), with medical supervision of adaptation
92326	Replacement of contact lens
CPT Codes: Amniotic Membrane Placement	
Code	**Code Description**
65778	Placement of amniotic membrane on the ocular surface; without sutures
65779	Placement of amniotic membrane on the ocular surface; single layer, sutured
65780	Ocular surface reconstruction; amniotic membrane transplantation, multiple layers
HCPCS Level II Codes: Contact Lens Supplies	
Code	**Code Description**
V2500	Contact lens, PMMA, spherical, per lens
V2501	Contact lens, PMMA, toric or prism ballast, per lens
V2502	Contact lens, PMMA, bifocal, per lens
V2510	Contact lens, gas permeable, spherical, per lens
V2511	Contact lens, gas permeable, toric, prism ballast, per lens
V2512	Contact lens, gas permeable, bifocal, per lens
V2513	Contact lens, gas permeable, extended wear, per lens
V2520	Contact lens, hydrophilic, spherical, per lens
V2521	Contact lens, hydrophilic, toric, or prism ballast, per lens
V2522	Contact lens, hydrophilic, bifocal, per lens
V2523	Contact lens, hydrophilic, extended wear, per lens
V2530	Contact lens, scleral, gas impermeable, per lens
V2531	Contact lens, scleral, gas permeable, per lens
V2627	Scleral cover shell
V2790	Amniotic membrane for surgical reconstruction, per procedure
S0500	Disposable contact lens, per lens
S0515	Scleral lens, liquid bandage device, per lens