# Glaucoma Surgery

| LOB(s): | State(s): |
|---|---|
| ☒ *Commercial*<br>☒ *Medicare* | ☒ *Idaho* ☒ *Montana* ☒ *Oregon* ☒ *Washington* ☐ *Other:* |
| ☒ *Medicaid* | ☒ *Oregon* ☐ *Washington* |

## Enterprise Policy

*PacificSource is committed to assessing and applying current regulatory standards, widely-used treatment guidelines, and evidenced-based clinical literature when developing clinical criteria for coverage determination. Each policy contains a list of sources (references) that serves as the summary of evidence used in the development and adoption of the criteria. The evidence was considered to ensure the criteria provide clinical benefits that promote patient safety and/or access to appropriate care. Each clinical policy is reviewed, updated as needed, and readopted, at least annually, to reflect changes in regulation, new evidence, and advancements in healthcare.*

*Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determinations are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.*

## Background

Glaucoma is an irreversible group of conditions/diseases involving damage to the optic nerve and loss of peripheral vision. Glaucoma was previously defined by high Intraocular Pressure (IOP); however, the condition is also found in individuals with normal or low eye pressure. Primary open-angle glaucoma (POAG) is the most common form, and other types include, but may not be limited to, angle-closure and congenital glaucoma; Prescription medication, in the form of eye drops, pills or both, is the most common early treatment for glaucoma.

Current standard surgical treatments for all types of glaucoma include; trabeculectomy, trabeculoplasty (incisional or laser), Iridotomy, iridectomy or iridoplasty. The most common surgical procedure for lowering IOP in glaucoma is a trabeculectomy (guarded filtration surgery), which creates a hole in the sclera to let the aqueous fluid drain into the outer cyst or bleb. The iStent Trabecular Micro-Bypass Stent System creates a permanent opening from the anterior chamber into Schlemm's canal to improve aqueous humor outflow past the trabecular meshwork, thereby reducing IOP.

Canaloplasty is a surgical technique for glaucoma which attempts to widen the eye's natural drainage canal to reestablish normal eye pressure. Tissue flap are cut in the conjunctive and sclera (ab externo) with goal of permanently opening entire length of Schlemm's canal.

## Criteria

### Commercial

**Prior authorization is required**

**I. iStent Trabecular Micro Bypass Stent**

**A.** PacificSource may consider iStent Trabecular Micro-Bypass Stent System medically necessary when **ALL** of the following criteria have been met:

1. Member is eighteen (18) years or older
2. Diagnosis of mild to moderate open-angle glaucoma
3. Pharmacologic management has failed to adequately control intraocular pressure
4. Procedure is in conjunction with cataract surgery for the reduction of intraocular pressure

**II. Canaloplasty (Ab Externo)**

**A.** PacificSource considers Canaloplasty (Ab Externo) medically necessary as a method to reduce intraocular pressure when **ALL** of the following conditions are met:

1. The member has a diagnosis of either chronic primary open-angle glaucoma (POAG) or normal-tension glaucoma
2. Pharmacologic management has failed to adequately control intraocular pressure
3. Surgical interventions, if appropriate, (e.g., trabeculectomy, repeat trabeculectomy, traculopasty or glaucoma drainage implant) have failed to adequately control intraocular pressure or member is at high risk for complications ( (e.g., infections, bleeding, or history of complications).

### Medicaid

PacificSource Community Solutions follows an internal hierarchal process in the *"Clinical Criteria Used in UM Decisions"* policy, which includes reviewing each code to identify relevant guideline notes from the OHP Prioritized List of Health Services and Oregon Administrative Rules (OAR) for coverage of iStent Trabecular Micro-Bypass Stent and canaloplasty.

PacificSource follows the *"Early and Periodic Screening, Diagnostic, and Treatment (EPSDT)"* criteria for members under 21 and Young Adults with Special Health Care Needs (YSHCN).

### Medicare

PacificSource Medicare follows Local Coverage Determination L38301 for Micro-Invasive Glaucoma Surgery

PacificSource Medicare follows CMS guidelines and criteria. In the absence of CMS guidelines and criteria, PacificSource Medicare will follow internal policy for determination of coverage and medical necessity.

## Experimental/Investigational/Unproven

PacificSource considers an Canaloplasty (Ab Interno) to be experimental, investigational, or unproven.

PacificSource considers iStent Trabecular Micro Bypass to be experimental, investigational, or unproven for any other indications.

PacificSource considers Canaloplasty (Ab Externo) to be experimental, investigational, or unproven for any other indications.

## Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

66174 Transluminal dilation of aqueous outflow canal; without retention of device or stent –

66175 Transluminal dilation of aqueous outflow canal; with retention of device or ~~stent~~

66179 Aqueous shunt to extraocular equatorial plate reservoir, external approach; without graft

66180 Aqueous shunt to extraocular equatorial plate reservoir, external approach; with graft

66183 Insertion of anterior segment aqueous drainage device, without extraocular reservoir, external approach

66989 Extracapsular cataract removal w/insert intraocular lens prosthesis, man/mech tech, complex, requ dev or tech not generally used routine cataract surg/amblyogenic dev stage;

66991 Extracapsular cataract removal w/insert intraocular lens prosthesis, man/ mech tech; w/insert of intraocular anterior segment aqueous drainage dev, w/o extraocular reservoir\

66999 Unlisted procedure, anterior segment of eye

0253T Insertion of anterior segment aqueous drainage device, without extraocular reservoir; internal approach, into the suprachoroidal space

0621T Trabeculostomy ab interno by laser

0622T Trabeculostomy ab interno by laser; with use of ophthalmic endoscope

0671T Insertion of anterior segment aqueous drainage device into the trabecular meshwork, without external reservoir, and without concomitant cataract removal, one or more

L8612 Aqueous Shunt Prosthesis



## Definitions

**Ab Interno-** Procedure approach from inside the eye

**Ab Externo-** Procedure approach from outside the eye.

**Canaloplasty-** Surgical procedure for glaucoma which attempts to widen the eye's natural drainage canal and reestablish normal eye pressure.

**Trabeculectomy-** Surgical procedure either done with laser or incision used to create a new channel, or "bleb" through which fluid can drain from the eye.

**Viscocanalostomy-** Surgical procedure similar to canaloplasty in which tissue flaps are cut in the conjunctiva and the sclera.

## References


American Academy of Ophthalmology. (2020). Primary Open-Angle Glaucoma Preferred Practice Pattern. https://www.aao.org/education/preferred-practice-pattern/primary-open-angle-glaucoma-ppp

American Glaucoma Society (AGS). (2012). Position Statement on New Glaucoma Surgical Procedure. https://www.americanglaucomasociety.net/about/statements

Brusini P. (2014). Canaloplasty in open-angle glaucoma surgery: a four-year follow-up. The Scientific World Journal, 2014, 469609. http://www.hindawi.com/journals/tswj/2014/469609/

Fea, A. M., Belda, J. I., Rękas, M., Jünemann, A., Chang, L., Pablo, L., Voskanyan, L., & Katz, L. J. (2014). Prospective unmasked randomized evaluation of the iStent inject (®) versus two ocular hypotensive agents in patients with primary open-angle glaucoma. Clinical ophthalmology (Auckland, N.Z.), 8, 875–882. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4019628/

Gandolfi, S. A., Ungaro, N., Ghirardini, S., Tardini, M. G., & Mora, P. (2016). Comparison of Surgical Outcomes between Canaloplasty and Schlemm's Canal Scaffold at 24 Months' Follow-Up. Journal of ophthalmology, 2016, 3410469. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4771907/

Hayes Knowledge Center. (April 6, 2023). Health Technology Assessment, Annual Review: Canaloplasty for Open-Angle Glaucoma.

Hayes Knowledge Center. (November 10, 2022). Health Technology Assessment, Annual Review: iStent Inject Trabecular Micro-Bypass Stent (Glaukos Corp.) as a Standalone Procedure for Open-Angle Glaucoma.

Hayes Knowledge Center. (August 11, 2022). Emerging Technology Report: iStent infinite Trabecular Micro-Bypass System for Open-Angle Glaucoma.

Heersink, M., & Dovich, J. (August 12, 2019). Ab interno canaloplasty combined with trabecular bypass stenting in eyes with primary open-angle glaucoma. National Center for Biotechnology Information. PubMed Central. US National Library of Medicine (Ncbi.Nlm.Nih.Gov) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6697664/

Jacobs, D., & Gardiner, M. (2024, December). *Open-angle glaucoma: Treatment*. UpToDate. https://www.uptodate.com/contents/open-angle-glaucoma-treatment?search=primary+glaucoma+surgery&source=search_result&selectedTitle=5~150&usage_type=default&display_rank=5

Liu H, Zhang H, Li Y, Yu H. Safety and efficacy of canaloplasty versus trabeculectomy in treatment of glaucoma. Oncotarget. 2017 Jul 4;8(27):44811-44818. doi: 10.18632/oncotarget.14757. PMID: 28118610; PMCID: PMC5546520.

The Health Evidence Review Commission (HERC) Prioritized List of Health Services https://www.oregon.gov/oha/HSD/OHP/Pages/Prioritized-List.aspx

Oregon Administrative Rules (OARs). Oregon Health Authority. Health Systems: Medical Assistance Programs – Chapter 410 https://secure.sos.state.or.us/oard/displayChapterRules.action?selectedChapter=87

U.S. Department of Health and Human Services. (2024, December 5). *Glaucoma surgery*. National Eye Institute. https://www.nei.nih.gov/learn-about-eye-health/eye-conditions-and-diseases/glaucoma/glaucoma-surgery

## Appendix

**Policy Number:**

**Effective:** 1/1/2021 **Next review:** 5/1/2025

**Policy type:** Enterprise

**Author(s):**

**Depts:** Health Services

**Applicable regulation(s):** CMS LCD L38301; OARs 410-120-1200, 410-141-3820, 410-141-3825, 410-151-0001, 410-151-0002, and 410-151-0003.

**Commercial OPs:** 2/2025

**Government OPs:** 1/2025