

Cataract White Paper and Update

Health Service Board Meeting | February 14, 2019

Cataract Surgery Coverage Recommendation

SFHSS recommends maintaining traditional cataract surgery coverage in our medical plans based on the findings gathered from subject matters experts, network health plans, and clinical research.

Overview of Traditional vs. Laser-Assisted Surgery Technique

	Traditional (Phacoemulsification)	Laser-Assisted (Femtosecond Laser-Assisted Cataract Surgery, or FLACS)
History	<ul style="list-style-type: none"> Technique introduced in the 1970s 	<ul style="list-style-type: none"> Technique introduced in 2009
Procedure	<ul style="list-style-type: none"> Surgeon makes an incision in the side of the cornea by hand Microsurgical instrument is inserted to create a circular opening in the lens capsule Ultrasound probe is used to break the cloudy lens and suction out the pieces An artificial intraocular lens (IOL) is implanted 	<ul style="list-style-type: none"> Camera/ultrasound is used to map and gather detailed information about the lens Laser is computer programmed with lens information to enable the surgeon to make a precise corneal incision Ultrasound probe is used to break the cloudy lens and suction out the pieces An artificial intraocular lens (IOL) is implanted
Healing Process	<ul style="list-style-type: none"> Incision does not require stitches Vision clears within 1-2 weeks Full recovery may take up to 3 months 	<ul style="list-style-type: none"> Incision does not require stitches Vision clears within 1-2 weeks Full recovery may take up to 3 months
Patient Outcomes	<ul style="list-style-type: none"> No statistically significant difference found between eyes undergoing traditional and laser-assisted cataract surgery with respect to refractive and visual outcomes. 	<ul style="list-style-type: none"> Laser-assisted surgery has a higher incidence of complications such as posterior or anterior capsule tears, corneal edema, and posterior capsule opacification requiring YAG (a special laser treatment used to improve your vision after cataract surgery).

Dick, H. B., & Schultz, T. (2017). A Review of Laser-Assisted Versus Traditional Phacoemulsification Cataract Surgery. *Ophthalmology & Therapy*

Boyd, K. (2017). Traditional cataract surgery vs. laser-assisted cataract surgery. *American Academy of Ophthalmology*

Popovic, Marko et al. (2016). Efficacy & safety of femtosecond laser-assisted cataract surgery compared with manual surgery, *Ophthalmology*

The Permanente Medical Group, Inc. (2019). Cataracts and Cataract Surgery

Rationale

- Traditional cataract surgery and the most common type of artificial lens (monofocal) are considered the standard of care, usually medically necessary, and are covered under Medicare
- Patients who have traditional surgery and implant a basic artificial lens will need glasses for reading and even sometimes distance
- Electing to use laser-assisted cataract surgery and investing in premium artificial lenses to eliminate dependence on glasses is based on cosmetic preference, usually not medically necessary, and is not routinely covered under Medicare.
- All types of artificial lenses (basic and premium) can be implanted using the traditional cataract surgery technique with proper measurement by the treating physician to guide accurate incision and placement.
- There is no evidence of improved patient outcome in laser-assisted surgery and it is associated with slightly higher complication rates.
- Laser assisted surgical time is longer compared to traditional cataract surgery.
- Traditional cataract surgery supports the most cost-effective delivery and value of HSS benefits to members.

Boyd, K. (2017). Traditional cataract surgery vs. laser-assisted cataract surgery. *American Academy of Ophthalmology*

Boyd, K. (2018). Astigmatism diagnosis and treatment. *American Academy of Ophthalmology*

Dick, H. B., & Schultz, T. (2017). A Review of Laser-Assisted Versus Traditional Phacoemulsification Cataract Surgery. *Ophthalmology & Therapy*

Olson, Randall J. et al. (2016) Cataract in the adult eye preferred practice pattern®, *Ophthalmology*

Popovic, Marko et al. (2016). Efficacy & safety of femtosecond laser-assisted cataract surgery compared with manual surgery, *Ophthalmology*

Average Cost of Cataract Surgery with No Insurance per eye (2017)

Cataract surgery with a standard monofocal IOL

\$3,599

Cataract surgery with an astigmatism-correcting IOL

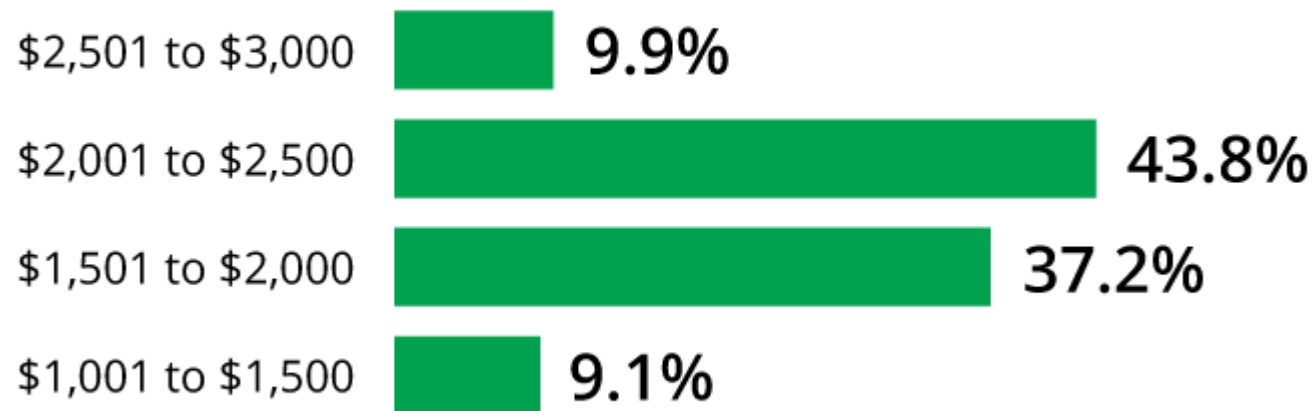
\$4,969

Cataract surgery with a presbyopia-correcting IOL

\$5,967

The cost of cataract surgery with a standard monofocal IOL generally is covered by Medicare or private medical insurance. But if you choose a toric IOL for astigmatism or a presbyopia-correcting IOL, you typically will have to pay a premium for these advanced lenses. In 2017, the average additional, out-of-pocket fees were \$1,370 for a toric IOL and \$2,368 for a presbyopia-correcting IOL. [Source: Market Scope, LLC]

Percentage of LASIK Surgeons Charging these fees per eye (2017)



Source: Market Scope, LLC