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MEDICAL POLICY



MEDICAL POLICY DETAILS		
Medical Policy Title	Intraocular Lens (IOL) Implants	
Policy Number	9.01.14	
Category	Contract Clarification	
Original Effective Date	10/27/05	
Committee Approval	08/31/06, 08/23/07, 08/28/08, 10/28/09, 10/28/10, 12/08/11, 10/25/12, 10/24/13, 10/23/14,	
Date	10/28/15, 10/27/16, 10/26/17, 10/25/18, 10/24/19, 10/22/20, 10/28/21, 10/20/22, 10/19/23,	
	10/17/24	
Current Effective Date	10/17/24	
Archived Date	N/A	
Archive Review Date	N/A	
Product Disclaimer	• Services are contract dependent; if a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.	
	• If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit.	
	• If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.	
	 If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit. If a Medicare HMO-Dual Special Needs Program (DSNP) product DOFS NOT cover 	
	a specific service, please refer to the Medicaid Product coverage line.	

POLICY STATEMENT

- I. Based upon our criteria and assessment of the peer-reviewed literature, the use of a monofocal (spherical or aspheric) intraocular lens (IOL) as replacement of the natural crystalline lens of the eye following cataract extraction is considered **medically appropriate**.
- II. Based upon our criteria and assessment of the peer reviewed literature, the use of a multifocal IOL, an astigmatismcorrecting lens, or an accommodating/trifocal IOL following cataract extraction is considered **not medically necessary**, as no superior medical benefit for these lenses has been demonstrated over the monofocal IOL, other than decreasing the need for corrective eye wear.

POLICY GUIDELINES

In a manner similar to the Centers for Medicare and Medicaid Services (CMS), patients/members may choose to receive an astigmatism-correcting, multifocal or accommodating IOL (*please refer to the CMS synopsis at the end of this policy*). Patients/members must sign a beneficiary notice waiver and agree to assume liability for the additional expense of the multifocal or accommodating lens. Reimbursement will be provided for only the cost of a standard or monofocal IOL. Patients/ members should be apprised of this option by their eye surgeon prior to the cataract extraction surgery.

DESCRIPTION

The eye functions much like a camera with two lenses. The first lens is the cornea, a clear membrane that covers the front of the eye. The second lens is the eye's natural crystalline lens, which is located behind the pupil. The cornea is responsible for about 70 percent of the eye's focusing power, while the natural lens "fine-tunes" the image before it is focused on the retina at the back of the eye. The natural lens accomplishes this fine-tuning function by changing shape to accommodate both near objects and those that are further away. Ciliary muscles and zonules are attached to the lens and are responsible for its ability to change shape. A cataract is a hardening and opacification of the normally transparent crystalline lens within the eye. Cataract formation usually occurs as part of the aging process but may also be congenital

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in nature. Rarely, a cataract may form when related to trauma or inflammation of the eye or may also result from the use of some medications. Cataracts may result in progressive loss of vision with the degree of loss depending on the location, size, and density of the cataract. Cataract surgery is indicated when the visual function no longer meets the patient's needs and there is a reasonable likelihood of vision improvement with the procedure. The current cataract procedure of choice is an extracapsular technique (removes only the lens) with the implantation of an intraocular lens.

IOLs are used to replace the natural lens and restore the optical focusing power of the eye. The more common replacement lenses include monofocal, multifocal or accommodating IOLs.

Monofocal IOLs are the current standard of treatment. This type of IOL usually has a fixed focusing power, which provides good distance vision and sometimes intermediate vision, but does not correct the patient's near vision, because the full accommodating ability of the eye is lost. Thus, the placement of a monofocal IOL usually requires corrective lenses or eyeglasses after surgery for reading and near-vision tasks. While a traditional, fixed monofocal IOL is spherical (the front surface is uniformly curved), an aspheric monofocal IOL is slightly flatter in the periphery, allowing for a better contrast sensitivity and a reduction in visual aberrations. The advent of aspheric IOLs has enhanced the quality of visual outcome for monofocal lenses.

Multifocal IOLs are designed to provide distance and near vision and are referred to as pseudoaccommodative lenses or dynamic lenses. The multifocal IOL structure allows light rays to be focused from both distance and near. This type of lens does not restore good intermediate vision, but the need for eyeglasses for near vision correction appears to be much less with the use of multifocal IOLs, compared to the monofocal IOL. Reports of increased glare, halos at night, variable loss of clarity, and low-contrast acuity have been reported by patients with the use of multifocal IOLs, creating patient dissatisfaction with the multifocal IOL variety.

Accommodating or trifocal IOLs are designed to provide good distance, intermediate, and near vision. The accommodating IOL has hinges at both ends, to facilitate forward and backward movement, and interacts with the eye's ciliary muscles and zonules, allowing variable-focus capability. This type of lens allows patients to see a continuous range of vision and greatly reduces the need for post-operative corrective lenses. Multifocal and accommodating IOLs are sometimes referred to as presbyopia correcting IOLs.

Astigmatism-correcting IOLs, also known as toric IOLs, provide correction or reduction of pre-existing astigmatism (astigmatism that was present before cataract surgery) by incorporating a special curvature into the IOL. Prior to the advent of toric IOLs, pre-existing astigmatism could only be corrected by making limbal relaxing incisions into the cornea during cataract surgery to change its curvature, or by wearing astigmatism-correcting eyeglasses after surgery.

RATIONALE

A Cochrane review (2003, 2006) comparing multifocal to monofocal lenses post-cataract surgery, found no statistical difference between the use of these IOLs relative to best-corrected visual acuity, although unaided near vision was improved with the use of multifocal lenses. Review of the literature found no studies to support that the pseudo-accommodating or accommodating lens technology is superior to standard-use monofocal IOLs. The long-term stability of the accommodative effect of these lenses is unknown, and some patients may still require corrective lenses after the multifocal or accommodative lenses are placed. A 2012 update of the Cochrane review by D. Calladine and colleagues noted that there was moderate quality evidence that similar distance acuity is achieved with both types of lenses. There was also evidence that people with multifocal lenses had better near vision, but methodological and statistical heterogeneity meant that they did not calculate a pooled estimate for effect on near vision. Total freedom from use of glasses was achieved more frequently with multifocal than monofocal IOLs. Adverse subjective visual phenomena, particularly haloes, or rings around lights, were more prevalent and more troublesome in participants with the multifocal IOLs are effective at improving near vision relative to monofocal IOLs. Whether that improvement outweighs the adverse effects of multifocal IOLs will vary between patients. Motivation to achieve spectacle independence is likely to be the deciding factor.

The American Academy of Ophthalmology 2022 preferred practice pattern (Miller et al.) regarding care for cataracts in the adult eye states the use of presbyopia correcting IOLs may improve a patient's quality of life by improving near and

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intermediate vision and decreasing the need for corrective eyewear after cataract surgery, though patient selection is critical. Patients should be informed of the potential compromise in quality of vision associated with the various choices. These patients were found to have more glare, halos, and reduced contrast sensitivity than patient with monofocal IOLs (good, strong quality of evidence). Intraocular lens implantation is the method of choice for correcting aphakia, unless there are specific contraindications. Posterior chamber IOL implantation inside the capsular bag is the optimal method for most cases. Cataract surgeons can choose from a wide variety of posterior chamber IOL styles and materials to find an appropriate lens to match their patients' needs. Intraocular lens optic size, shape, haptic configuration, optic edge design, optic and haptic materials, and chromophore content are engineered with a variety of characteristics. Foldable IOLs are commonly used because of their ability to fit through small incisions, and they have largely replaced rigid polymethyl methacrylate (PMMA) posterior chamber IOLs. Foldable IOLs can be made from silicone, hydrophilic acrylic, and hydrophobic acrylic. All foldable IOL materials are associated with minimal giant-cell foreign-body reaction. Surgeons should be familiar with the unique positive and negative features of each IOL type with regard to material, design, and insertion system.

CODES

- Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.
- CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.
- Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.
- *Code Key: Experimental/Investigational = (E/I), Not medically necessary/ appropriate = (NMN).*

Code	Description
66982	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one-stage
	procedure), manual or mechanical technique (e.g., irrigation and aspiration or
	phacoemulsification), complex, requiring devices or techniques not generally used in
	routine cataract surgery (e.g., iris expansion device, suture support for intraocular
	lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic
	developmental stage; without endoscopic cyclophotocoagulation
66983	Intracapsular cataract extraction with insertion of intraocular lens prosthesis (one-
	stage procedure)
66984	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one-stage
	procedure), manual or mechanical technique (e.g., irrigation and aspiration or
	phacoemulsification); without endoscopic cyclophotocoagulation
66985	Insertion of intraocular lens prosthesis (secondary implant), not associated with
	concurrent cataract removal
66986	Exchange of intraocular lens
66987	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one-stage
	procedure), manual or mechanical technique (e.g., irrigation and aspiration or
	phacoemulsification), complex, requiring devices or techniques not generally used in
	routine cataract surgery (e.g., iris expansion device, suture support for intraocular
	lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic
	developmental stage; with endoscopic cyclophotocoagulation
66988	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one-stage
	procedure), manual or mechanical technique (e.g., irrigation and aspiration or
	phacoemulsification); with endoscopic cyclophotocoagulation

CPT Codes

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Code	Description
66989	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one-stage
	procedure), manual or mechanical technique (e.g., irrigation and aspiration or
	phacoemulsification), complex, requiring devices or techniques not generally used in
	routine cataract surgery (e.g., iris expansion device, suture support for intraocular
	lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic
	developmental stage; with insertion of intraocular (e.g., trabecular meshwork,
	supraciliary, suprachoroidal) anterior segment aqueous drainage device, without
	extraocular reservoir, internal approach, one or more
66991	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one-stage
	procedure), manual or mechanical technique (e.g., irrigation and aspiration or
	phacoemulsification); with insertion of intraocular (ego, trabecular meshwork,
	supraciliary, suprachoroidal) anterior segment aqueous drainage device, without
	extraocular reservoir, internal approach, one or more

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HCPCS Codes

Code	Description
C1780	Lens, intraocular (new technology)
V2630	Anterior chamber intraocular lens
V2631	Iris supported intraocular lens
V2632	Posterior chamber intraocular lens
V2787 (NMN)	Astigmatism correcting function of intraocular lens
V2788 (NMN)	Presbyopia correcting function of intraocular lens

ICD10 Codes

Code	Description
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract
E10.36	Type 1 diabetes mellitus with diabetic cataract
E11.36	Type 2 diabetes mellitus with diabetic cataract
E13.36	Other specified diabetes mellitus with diabetic cataract
H25.011-H25.9	Age-related cataract (code range)
H26.001-H26.09	Infantile and juvenile cataract (code range)
H26.101-H26.139	Traumatic cataract (code range)
H26.20	Unspecified complicated cataract
H26.211-H26.219	Cataract with neovascularization (code range)
H26.221-H26.229	Cataract secondary to ocular disorders (degenerative) (inflammatory), (code range)
H26.231-H26.239	Glaucomatous flecks (subcapsular), (code range)
H26.30-H26.33	Drug-induced cataract (code range)
H26.40	Unspecified secondary cataract
H26.411-H26.419	Soemmerring's ring (code range)
H26.491-H26.499	Other secondary cataract (code range)
H26.8	Other specified cataract
H26.9	Unspecified cataract
H28	Cataract in diseases classified elsewhere
Z96.1	Presence of intraocular lens

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REFERENCES

Al-Mohtaseb Z, et al. Toric monofocal intraocular lenses for the correction of astigmatism during cataract surgery: A Report by the American Academy of Ophthalmology. <u>Ophthalmology</u> 2024 Mar;131(3):383-392.

*Alfonso JF, et al. Intermediate visual function with different multifocal intraocular lens models. <u>J Cataract Refract Surg</u> 2010 May;36(5):733-9.

Ang, RE. Comparison of tolerance to induced astigmatism in pseudophakic eyes implanted with small aperture, trifocal, or monofocal intraocular lenses. <u>Clinical Ophthalmology</u> 2019;13: 905–911.

Auffarth GU, et al. Clinical evaluation of a new monofocal IOL with enhanced intermediate function in patients with cataract. <u>J Cataract Refract Surg</u> 2021 Feb; 47:184-191.

*Bartol-Puyal FA, et al. Reading and quality of life differences between Tecnis ZCB00 monofocal and Tecnis ZMB00 multifocal intraocular lenses. <u>Eur J Ophthalmol</u> 2017 June;27(4):443-453.

*Brown D, et al. Functional reading acuity and performance: comparison of 2 accommodating intraocular lenses. J Cataract Refract Surg 2009 Oct;35(10):1711-4.

Buzzonetti L, et al. Comparative analysis of visual outcomes of multifocal and monofocal intraocular lenses in congenital cataract surgery. <u>J Cataract Refract Surg</u> 2022 Jan; 48(1): 56-60.

*Calladine D, et al. Multifocal versus monofocal intraocular lenses after cataract extraction. Cochrane Database Syst Rev 2012 Sep;9:CD003169.

*Calladine D, et al. Multifocal versus monofocal intraocular lenses after cataract extraction. <u>Sao Paulo Med J</u> 2015 Feb;133(1):68.

Chang JSM, et al. Monovision with a bifocal diffractive multifocal intraocular lens in presbyopic patients: A prospective, observational case series. <u>Am J Ophthalmol</u> 2020;212:105-115.

*Claoue C. Functional vision after cataract removal with multifocal and accommodating intraocular lens implantation: prospective comparative evaluation of Array multi-focal and 1 CU accommodating lenses. <u>J Cataract Refract Surg</u> 2004 Oct;30(10):2088-91.

*Cochener B, et al. Corrected and uncorrected near and distance vision with ReSTOR compared to monofocal intraocular lens implantation after cataract surgery: a pooled analysis. <u>Ophthalmolgica</u> 2009;223(2):128-35.

*Cumming JS, et al. Clinical evaluation of the model AT-45 silicone accommodating intraocular lens: results of feasibility and the initial phase of a Food and Drug Administration clinical trial. <u>Ophthalmol</u> 2001 Nov;108(11):2005-9.

*Dolders MC, et al. Cost effectiveness of foldable multifocal intraocular lenses compared to foldable monofocal intraocular lenses for cataract surgery. <u>Br J Ophthalmol</u> 2004 Sept;88(9):1163-8.

Fernández J, et al. Systematic review of potential causes of intraocular lens opacification. <u>Clin Experiment Ophthalmol</u> 2020;48:89-97.

*Forte R, et al. The ReZoom multifocal intraocular lens: 2-year follow-up. Eur J Ophthalmol 2009 May-Jun;19(3):380-3.

Giglio R, et al. Visual outcomes and patient satisfaction after bilateral implantation of an enhanced monofocal intraocular lens: a single-masked prospective randomized study. Int Ophthalmol 2024 Feb;44(1):112.

Guarro M, et al. Visual disturbances produced after the implantation of 3 EDOF intraocular lenses vs 1 monofocal intraocular lens. J Cataract Refract Surg 2022 Dec;48(12):1354-1359.

*Hantera MM, et al. Initial experience with an accommodating intraocular lens: controlled prospective study. <u>J Cataract</u> <u>Refract Surg</u> 2010 Jul;36(7):1167-72.

*Hutz WW, et al. Reading ability with 3 multifocal intraocular lens models. <u>J Cataract Refract Surg</u> 2006 Dec;32 (12):2015-21.

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*Javitt JC, et al. Cataract extraction with multifocal intraocular lens implantation: a multinational clinical trial evaluating clinical, functional, and quality-of-life outcomes. <u>Ophthalmol</u> 2000 Nov;107(11):2040-8.

*Jonker SM, et al. Comparison of a trifocal intraocular lens with a +3.0 bifocal IOL: results of a prospective randomized clinical trial. <u>J Cataract Refract Surg</u> 2015 Aug;41(8):1631-1640.

*Kretz FT, et al. Clinical outcomes after implantation of a trifocal toric intraocular lens. <u>J Refract Surg</u> 2015 Aug;31(8):504-510.

Lambert SR, et al. Long-term effect of intraocular lens vs contact lens correction on visual acuity after cataract surgery during infancy: A randomized clinical trial. JAMA Ophthalmol 2020 Apr; 138(4): 365-372.

*Macsai MS, et al. Visual outcomes after accommodating intraocular lens implantation. <u>J Cataract Refract Surg</u> 2006 Apr;32 (4):628-33.

*Mastropasqua R, et al. Long-term visual function and patient satisfaction after bilateral implantation and combination of two similar multifocal IOLs. <u>J Refract Surg</u> 2015 May;31(5):308-14.

*Mendicute J, et al. Toric intraocular lens versus opposite clear corneal incisions to correct astigmatism in eyes having cataract surgery. <u>J Cataract Refract Surg</u> 2009 Mar;35(3):451-8.

*Miller KM, et al; American Academy of Ophthalmology Preferred Practice Pattern Cataract/Anterior Segment Panel. Cataract in the Adult Eye Preferred Practice Pattern. <u>Ophthalmology</u> 2022 Jan;129(1):P1-P126.

Moshirfar M, et al. Astigmatic correction with implantation of a light adjustable vs monofocal lens: a single site analysis of a randomized controlled trial. Int J Ophthalmol 2019;12(7):1101-1107.

Paik DW, et al. Comparing the visual outcome, visual quality, and satisfaction among three types of multi-focal intraocular lenses. <u>Scientific Reports</u> 2020 Sept; 10:1-10.

*Ruiz-Mesa R, et al. Refractive lens exchange with foldable toric intraocular lens. <u>Am J Ophthalmol</u> 2009 Jun;147(6):990-6.

*Schallhorn J, et al. Multifocal and accommodating intraocular lenses for the treatment of presbyopia a report by the American Academy of Ophthalmology. Ophthalmic Technology Assessment. <u>Ophth</u> 2021 Oct; 28(10): 1469-1482.

Shin DE, et al. Comparative analysis of a presbyopia-correcting intraocular lens that combines extended depth-of-focus and bifocal profiles with a standard monofocal intraocular lens. <u>BMC Ophthalmol</u> 2022 Jul; 22(1): 302.

Sridhar U, Tripathy K. Monofocal Intraocular Lenses. [Updated 2023 May]. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Aug-. [https://www.ncbi.nlm.nih.gov/books/NBK580484/] accessed 09/17/24.

*Takakura A, et al. Functional assessment of accommodating intraocular lenses versus monofocal intraocular lenses in cataract surgery: meta-analysis. <u>J Cataract Refract Surg</u> 2010 Mar;36(3):380-8.

*Till JS, et al. Toric intraocular lens implantation: 100 consecutive cases. <u>J Cataract Refract Surg</u> 2002 Feb;28(2):295-301.

*Werner L, et al. New technology IOL optics. Ophthalmol Clin North Am 2006 Dec;19(4):469-83.

*Zhao G, et al. Visual function after monofocal implantation of apodized diffractive multifocal or single piece monofocal intraocular lens randomized prospective comparison. <u>J Cataract Refract Surg</u> 2010 Feb;36(2):282-5.

*Key Article

KEY WORDS

Accommodating, Aspheric, Astigmatism-correcting, Crystalens, dynamic, Monofocal, Multifocal, pseudoaccommodating, toric.

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CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a National Coverage Determination (NCD) for Intraocular Lenses (IOLs) (80.12). Please refer to the following NCD website for Medicare Members:

[http://www.cms.gov/medicare-coverage-database/details/ncd-

details.aspx?NCDId=239&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York+-+Upstate&CptHcpcsCode=36514&bc=gAAABAAAAA&] accessed 09/17/24.