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Company Entities Supported (Select All that Apply): <input checked="" type="checkbox"/> Superior Vision Benefit Management <input checked="" type="checkbox"/> Superior Vision Services <input checked="" type="checkbox"/> Superior Vision of New Jersey, Inc. <input checked="" type="checkbox"/> Block Vision of Texas, Inc. d/b/a Superior Vision of Texas <input checked="" type="checkbox"/> Davis Vision (Collectively referred to as 'Versant Health' or 'the Company')
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ACRONYMS	
IOP	Intraocular Pressure
OCT	Optical Coherence Tomography
VF	Visual Field

PURPOSE

To provide the medical necessity criteria to support the indications for perimetry and to render medical necessity determinations. Applicable procedure codes are also defined.

POLICY

A. Background

The visual field (VF) is the area within which objects may be seen when the eye is fixated. Perimetry, also known as visual field testing, detects both the extent of the visual fields as well as defects in the field of vision arising from the retina, optic nerve and visual pathways. Visual field tests are commonly performed using automated perimetry, which measures the ability to see points of light at varying locations and intensities. Many brands and configurations of computerized perimeters are available (e.g., Humphrey, Octopus, and Oculus). However, non-automated perimeters are occasionally utilized.

B. Medically Necessary

The medical necessity for initial diagnostic testing may begin with pertinent signs, symptoms, suspicion or disease, or medical history of a condition for which the examining physician needs further information.¹ VF testing is typically performed when the information from an eye exam is insufficient to assess the patient's condition, detect the presence of a disease process, or monitor progression of a condition. Visual field examinations may be considered medically necessary for any of the following:

1. The patient has a disorder of the eyelid(s) potentially affecting the visual field(s).
2. The patient has a visual field defect detected in gross visual field testing (e.g., confrontational testing).
3. The patient has a documented diagnosis of glaucoma or glaucoma suspect.
4. The patient has a documented disorder of the optic nerve, the retina, or the neurologic visual pathway.²
5. The patient has a recent intracranial hemorrhage, mass, or other specified disease
6. The patient has increased intracranial pressure measurement (with or without visual symptoms).
7. The patient has a recent occlusion / stenosis of cerebral arteries.
8. The patient has a history of a cerebral aneurysm, pituitary or occipital tumor potentially affecting the visual fields.
9. The patient is being evaluated for buphthalmos, congenital anomalies of the posterior segment or congenital ptosis.
10. The patient has a disorder of the orbit
11. The patient has sustained a significant eye injury.
12. The patient has unexplained visual loss
13. The patient has a recent exam with an abnormal appearance of pale or swollen optic nerve.
14. The patient is having new functional limitations which may be due to visual field loss (e.g., reports by family of patient bumping into objects).
15. The patient is taking a high risk medication that affects the visual system such as hydroxychloroquine or ethambutol;
16. The patient is being evaluated for transient visual loss;
17. Repeat testing is appropriate based upon the type and natural history of the disorder, the physical findings, and the patient's symptoms.

C. Not Medically Necessary

Gross visual field testing (e.g., confrontation testing) is included in general ophthalmological services and should not be reported separately.

¹ McKendrick, 2024

² Banc, 2024.

D. Documentation

Medical necessity must be supported by adequate and complete documentation in the patient’s medical record that describes the procedure and the medical rationale for it as in requirements above. For all retrospective reviews, the full operative report or the medical care plan must be available.

All items must be available upon request. Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, date(s) of service). Services provided/ordered must be authenticated by the physician, in a handwritten or electronic signature. Stamped signatures are not acceptable.

Each visual field test requires an interpretation and report which includes:

1. Physician’s order for test with medical rationale
2. Date performed
3. Reliability of the visual fields
4. Patient cooperation
5. Visual field findings (e.g., printout) and interpretation
6. When applicable, comparison of current results from prior tests in terms of progression, resolution or stability of the visual fields.
7. Evaluation and diagnosis
8. Impact on treatment and prognosis
9. The medical record must contain copies of the digital images and be available upon request.

E. PROCEDURAL DETAIL

CPT Codes	
92081	Visual field examination, unilateral or bilateral, with interpretation and report; limited examination (e.g., tangent screen, Autoplot, arc perimeter, or single stimulus level automated test, such as Octopus 3 or 7 equivalent)
92082	Intermediate examination (e.g., at least 2 isopters on Goldmann perimeter, or semiquantitative, automated suprathreshold screening program, Humphrey suprathreshold automatic diagnostic test, Octopus program 33)
92083	Extended examination (e.g., Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus programs G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 2-4-2, or 30/60-2)

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RELATED POLICIES AND PROCEDURES	
n/a	

DOCUMENT HISTORY		
<i>Approval Date</i>	<i>Revision</i>	<i>Effective Date</i>
03/21/2018	Administrative updates	03/21/2018
10/18/2019	Annual review and format change	11/01/2019
08/19/2020	Annual review; no criteria changes	12/01/2020
07/07/2021	Annual review; no criteria changes	10/01/2021
07/06/2022	Annual review; no criteria changes	08/01/2022

07/12/2023	Clarify indications include glaucoma suspect and suspicion of disease; clarify high risk medications include ethambutol.	09/01/2023
07/10/2024	Annual review; no criteria changes.	09/01/2024

REFERENCES AND SOURCES

1. Anderson C, Blaha GR, Marx JL. Humphrey visual field findings in hydroxychloroquine toxicity. *Eye (Lond)*. 2011;25(12):1535-1545. doi:10.1038/eye.2011.245.
2. Anderson AJ, Asokan R, Murata H, et.al. Detecting glaucomatous progression with infrequent visual field testing. *Ophthalmic Physiol Opt*. 2018 Mar;38(2):174-182. doi: 10.1111/opo.12439. Epub 2018 Jan 8. PMID: 29315705.
3. Banc A, Kedar S. Interpretation of the Visual Field in Neuro-ophthalmic Disorders. *Curr Neurol Neurosci Rep*. 2024 Mar;24(3):67-81. doi: 10.1007/s11910-024-01332-3. Epub 2024 Jan 30. PMID: 38289405.
4. Behera G, Nath A, Ramasamy A, et.al. Comparing Static Perimetry Protocols of Central Field Testing among Glaucoma Patients. *Optom Vis Sci*. 2023 May 1. doi: 10.1097/OPX.0000000000002020. Epub ahead of print. PMID: 37129640.
5. Bryan SR, Eilers PH, Lesaffre EM, et.al. Global Visit Effects in Point-Wise Longitudinal Modeling of Glaucomatous Visual Fields. *Invest Ophthalmol Vis Sci*. 2015;56(8):4283-4289. doi:10.1167/iovs.15-16691.
6. Cahill KV, Bradley EA, Meyer DR. et.al. Functional indications for upper eyelid ptosis and blepharoplasty surgery: a report by the American Academy of Ophthalmology. *Ophthalmology*. 2011 Dec;118(12):2510-7. doi: 10.1016/j.ophtha.2011.09.029. Epub 2011 Oct 22. PMID: 22019388.
7. Camp AS, Weinreb RN. Will Perimetry Be Performed to Monitor Glaucoma in 2025? *Ophthalmology*. 2017;124(12S): S71–S75. doi: 10.1016/j.ophtha.2017.04.009.
8. Cassels NK, Wild JM, Margrain TH, et.al. The use of microperimetry in assessing visual function in age-related macular degeneration. *Surv Ophthalmol*. 2018;63(1):40-55. doi: 10.1016/j.survophthal.2017.05.007.
9. Chesley B, Barbour DL. Visual Field Estimation by Probabilistic Classification. *IEEE J Biomed Health Inform*. 2020 Dec;24(12):3499-3506. doi: 10.1109/JBHI.2020.2999567. Epub 2020 Dec 4. PMID: 32750922.
10. Chiang TK, White KM, Kurup SK, et.al. Use of Visual Electrophysiology to Monitor Retinal and Optic Nerve Toxicity. *Biomolecules*. 2022 Sep 29;12(10):1390. doi: 10.3390/biom12101390. PMID: 36291599; PMCID: PMC9599231.
11. De Moraes CG, Liebmann JM, Levin LA. Detection and measurement of clinically meaningful visual field progression in clinical trials for glaucoma. *Prog Retin Eye Res*. 2017; 56:107-147. doi: 10.1016/j.preteyeres.2016.10.001.
12. Drummond PD, Anderson M. Visual field loss after attacks of migraine with aura. *Cephalalgia*. 1992;12(6):349-352. doi:10.1111/j.1468-2982.1992.00349.x
13. Fidalgo BM, Crabb DP, Lawrenson JG. Methodology and reporting of diagnostic accuracy studies of automated perimetry in glaucoma: evaluation using a standardized approach. *Ophthalmic Physiol Opt*. 2015 May;35(3):315-23. doi: 10.1111/opo.12208. PMID: 25913874.

14. Fulk GW, West RW, Nakagawara VB. Effect of simulated altitude on the visual fields of glaucoma patients and the elderly. *Optom Vis Sci.* 1991;68(5):344-350. doi:10.1097/00006324-199105000-00004.
15. Hanout M, Horan N, Do DV. Introduction to microperimetry and its use in analysis of geographic atrophy in age-related macular degeneration. *Curr Opin Ophthalmol.* 2015;26(3):149–156. doi:10.1097/ICU.000000000000153.
16. Harrold AL, Grove PM. Binocular correspondence and the range of fusible horizontal disparities in the central visual field. *J Vis.* 2015;15(8):12. doi:10.1167/15.8.12.
17. Ho JC. Reduction in mean deviation values in automated perimetry in eyes with multifocal compared to monofocal intraocular lens implants. *Am J Ophthalmol.* 2014;158(5):1100–1101. doi: 10.1016/j.ajo.2014.08.030.
18. Johnson CA. Psychophysical factors that have been applied to clinical perimetry. *Vision Res.* 2013; 90:25–31. doi: 10.1016/j.visres.2013.07.005.
19. Johnson CA, Wall M, Thompson HS. A history of perimetry and visual field testing. *Optom Vis Sci.* 2011 Jan;88(1): E8-15. doi: 10.1097/OPX.0b013e3182004c3b. PMID: 21131878.
20. Kaczorowski K, Mulak M, Szumny D, et.al. Heidelberg Edge Perimeter: The New Method of Perimetry. *Adv Clin Exp Med.* 2015 Nov-Dec;24(6):1105-12. doi: 10.17219/acem/43834. PMID: 26771985.
21. Karimi S, Arabi A, Shahraki T. Alcohol and the Eye. *J Ophthalmic Vis Res.* 2021 Apr 29;16(2):260-270. doi: 10.18502/jovr.v16i2.9089. PMID: 34055263; PMCID: PMC8126742.
22. Keeffe JE, Charlton JL. Visual fields and driving. *Clin Exp Ophthalmol.* 2007;35(7):594-595. doi:10.1111/j.1442-9071.2007.01601.x.
23. Klee S, Link D, Sinzinger S, et.al. Scotoma Simulation in Healthy Subjects. *Optom Vis Sci.* 2018;95(12):1120-1128. doi:10.1097/OPX.0000000000001310.
24. Krishnadas R. Commentary: Evolving role of portable visual field testing in communities. *Indian J Ophthalmol.* 2021 Jan;69(1):92-93. doi: 10.4103/ijo.IJO_731_20. PMID: 33323584; PMCID: PMC7926101.
25. Kucur ŞS, Márquez-Neila P, Abegg M, et.al. Patient-attentive sequential strategy for perimetry-based visual field acquisition. *Med Image Anal.* 2019 May; 54:179-192. doi: 10.1016/j.media.2019.03.002. Epub 2019 Mar 23. PMID: 30933865.
26. Masket S, Magdolna Rupnik Z, Fram NR, et.al. Binocular Goldmann visual field testing of negative dysphotopsia. *J Cataract Refract Surg.* 2020 Jan;46(1):147-148. doi: 10.1097/j.jcrs.0000000000000001. PMID: 32050245.
27. McKendrick AM, Turpin A. Understanding and identifying visual field progression. *Clin Exp Optom.* 2024 Mar;107(2):122-129. doi: 10.1080/08164622.2024.2316002. Epub 2024 Mar 11. PMID: 38467126.
28. McKendrick AM, Turpin A. Understanding and identifying visual field progression. *Clin Exp Optom.* 2024 Mar;107(2):122-129. doi: 10.1080/08164622.2024.2316002. Epub 2024 Mar 11. PMID: 38467126.
29. Mönter VM, Crabb DP, Artes PH. Reclaiming the Periphery: Automated Kinetic Perimetry for Measuring Peripheral Visual Fields in Patients with Glaucoma. *Invest Ophthalmol Vis Sci.* 2017;58(2):868-875. doi:10.1167/iovs.16-19868.
30. Neshet R, Almog Y, Gorck L, et.al. A new method for eyelid elevation in glaucoma patients with ptosis during automated perimetry testing. *J Glaucoma.* 2007;16(2):260–263. doi:10.1097/IJG.0b013e31802ff87c.
31. Nouri-Mahdavi K. Selecting visual field tests and assessing visual field deterioration in glaucoma. *Can J Ophthalmol.* 2014;49(6):497-505. doi: 10.1016/j.cjpo.2014.10.002.
32. 2021 Mar 1;32(2):92-97. doi: 10.1097/ICU.0000000000000735. PMID: 33443958.

