

POLICY TITLE	VISION THERAPY
POLICY NUMBER	MP-4.007

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I. POLICY

Vision therapy may be considered **medically necessary** for the following conditions:

- Strabismus
- Accommodative dysfunction (e.g., accommodative insufficiency)
- General binocular dysfunction (e.g., convergence insufficiency)
- Amblyopia when performed by a physician, optometrist, or licensed physical therapist (when prescribed by a physician or optometrist)

Up to 12 sessions of office-based vergence/accommodative therapy, typically performed once per week, has been shown to improve symptomatic convergence insufficiency in children aged 9 to 17 years. If patients remain symptomatic after 12 weeks of orthoptic training, alternative interventions should be considered.

Vision therapy to improve symptomatic convergence insufficiency in those younger than 9 or older than 17 years of ages is considered **not medically necessary**.

Note: Vision therapy for conditions other than listed above requires review by a Medical Director.

Orthoptic eye exercises are considered **not medically necessary** for the treatment of learning disabilities.

A home computer orthoptic program consisting of eye exercises performed when following computer instructions that is tailored to the patient’s personal binocular problem is considered **not medically necessary**.

Orthoptic eye exercises are **investigational** for all other conditions, including but not limited to the following:

- Slow reading
- Visual disorders other than those listed above in the policy
- Problems related to concussions

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There is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure for these indications.

Policy Guidelines

This policy addresses office-based orthoptic training. This policy does not address standard vision therapy with lenses, prisms, filters or occlusion (i.e., for treatment of amblyopia or acquired esotropia prior to surgical intervention).

A diagnosis of convergence insufficiency is based on asthenopic symptoms (sensations of visual or ocular discomfort) at near point combined with difficulty sustaining convergence.

Convergence insufficiency and stereoacuity is documented by:

- Exodeviation at near vision at least 4 prism diopters greater than at far; AND
- Insufficient positive fusional vergence at near (positive fusional vergence (PFV) less than 15 prism diopters blur or break) on PFV testing using a prism bar; AND
- Near point of convergence (NPC) break of more than 6 cm; AND
- Appreciation by the patient of at least 500 seconds of arc on stereoacuity testing.

Cross-references:

MP-2.304 Autism Spectrum Disorders

II. PRODUCT VARIATIONS

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This policy is applicable to all programs and products administered by Capital BlueCross unless otherwise indicated below.

FEP PPO: Eye exercises, visual training, or orthoptics are covered for the treatment of amblyopia and strabismus for children from birth through age 21. Refer to the FEP Administrative Procedures Manual and Benefit Policy Manual available at www.fepblue.org.

III. DESCRIPTION/BACKGROUND

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Common forms of vision therapy are known as orthoptics and pleoptics. Orthoptics is a technique of eye exercises intended to improve eye movements and/or visual tracking. Pleoptics are eye exercises used to improve impaired vision when there is no evidence of organic eye diseases.

Common diagnoses for which vision therapy is used as a treatment are amblyopia, strabismus, accommodative strabismus, and general binocular dysfunction.

Convergence insufficiency (CI) is a binocular vision disorder in the ability for the eyes to turn inward towards each other (e.g., when looking at near objects). Symptoms of this common condition may include eyestrain, headaches, blurred vision, diplopia, sleepiness, difficulty concentrating, movement of print, and loss of comprehension after short periods of reading or performing close activities. Prism reading glasses, home therapy with pencil push-ups, and

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office-based vision therapy and orthoptics have been evaluated for the treatment of convergence insufficiency.

Some learning disabilities, particularly those in which reading is impaired, have been associated with deficits in eye movements and/or visual tracking. For example, many dyslexic persons may have unstable binocular vision and report that letters may appear to move around, causing visual confusion.

Orthoptic training refers to techniques designed to correct accommodative and convergence insufficiency (or convergence dysfunction), which may include push-up exercises using an accommodative target of letters, numbers, or pictures; push-up exercises with additional base-out prisms; jump-to-near convergence exercises; stereogram convergence exercises; and recession from a target.¹ A related but distinct training technique is behavioral or perceptual vision therapy, in which eye movement and eye-hand coordination training techniques are used to improve learning efficiency by optimizing visual processing skills.

In addition to its use in the treatment of accommodative and convergence dysfunction, orthoptic training is being investigated for the treatment of attention deficient disorders, dyslexia, dysphasia, and reading disorders.

IV. RATIONALE

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Summary of Evidence

For individuals who have convergence insufficiency who receive office-based orthoptic training, the evidence includes a TEC Assessment, several randomized controlled trials (RCTs), and nonrandomized comparative studies. Relevant outcomes are symptoms and functional outcomes. The most direct evidence on office-based orthoptic training comes from a 2008 RCT that demonstrated office-based vision or orthoptic training improves symptoms of convergence insufficiency in a greater percentage of patients than a home-based vision exercise program consisting of pencil push-ups or home computer vision exercises. Subanalyses of this RCT demonstrated improvements in accommodative vision, parental perception of academic behavior, and specific convergence insufficiency symptoms. However, in this trial, as in others, the home-based regimen did not include the full range of home-based therapies, which may have biased results in favor of the orthoptic training. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have learning disabilities who receive office-based orthoptic training, the evidence includes a TEC Assessment as well as nonrandomized comparative and noncomparative studies. Relevant outcomes are functional outcomes. A 1996 TEC Assessment did not find evidence that orthoptic training improves outcomes for individuals with learning disabilities. Since that publication, peer-reviewed studies have not directly demonstrated improvements in reading or learning outcomes with orthoptic training. At least 2 earlier studies that have addressed other types of vision therapies reported mixed improvements in reading. The evidence is insufficient to determine the effects of the technology on health outcomes.

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Concussion and Traumatic Brain Injury

The American Medical Society for Sports Medicine’s position statement on “Concussion in sport” (Harmon et al, 2013) and the Ontario Neurotrauma Foundation’s guidelines for diagnosing and managing pediatric concussion (2014) do not mention vision therapy as a management tool.

Furthermore, UpToDate reviews on “Concussion and mild traumatic brain injury” (Evans, 2016a), “Postconcussion syndrome” (Evans, 2016b), and “Concussion in children and adolescents: Management” (Meehan and O’Brien, 2016) do not mention vision therapy as a management tool.

V. DEFINITIONS

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ACCOMMODATIVE STRABISMUS is strabismus resulting from an abnormal demand on accommodations, such as convergent strabismus, uncorrected hyperopia, divergent strabismus, or uncorrected myopia.

AMBLYOPIA means reduced vision in an eye not correctable by a manifest refraction and with no obvious pathologic or structural cause.

BINOCULAR VISION is the visual sensation that is produced when the images perceived by each eye are fused to appear as one.

STRABISMUS refers to an abnormal ocular condition in which the visual axes of the eyes are not directed at the same point.

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's contract. Benefit determinations should be based in all cases on the applicable contract language. Medical policies do not constitute a description of benefits. A member’s individual or group customer benefits govern which services are covered, which are excluded, and which are subject to benefit limits and which require preauthorization. Members and providers should consult the member’s benefit information or contact Capital BlueCross for benefit information.

VII. DISCLAIMER

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Capital BlueCross medical policies are developed to assist in administering a member’s benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical

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policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member’s benefit information, the benefit information will govern. Capital BlueCross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Covered when medically necessary:

CPT Codes							
92065							

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ICD-10-CM Diagnosis Codes	Description
H50.011	Monocular esotropia, right eye
H50.012	Monocular esotropia, left eye
H50.021	Monocular esotropia with A pattern, right eye
H50.022	Monocular esotropia with A pattern, left eye
H50.031	Monocular esotropia with V pattern, right eye
H50.032	Monocular esotropia with V pattern, left eye
H50.041	Monocular esotropia with other noncomitancies, right eye
H50.042	Monocular esotropia with other noncomitancies, left eye
H50.05	Alternating esotropia
H50.06	Alternating esotropia with A pattern
H50.07	Alternating esotropia with V pattern
H50.08	Alternating esotropia with other noncomitancies
H50.111	Monocular exotropia, right eye
H50.112	Monocular exotropia, left eye
H50.121	Monocular exotropia with A pattern, right eye
H50.122	Monocular exotropia with A pattern, left eye

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ICD-10-CM Diagnosis Codes	Description
H50.131	Monocular exotropia with V pattern, right eye
H50.132	Monocular exotropia with V pattern, left eye
H50.141	Monocular exotropia with other noncomitancies, right eye
H50.142	Monocular exotropia with other noncomitancies, left eye
H50.15	Alternating exotropia
H50.16	Alternating exotropia with A pattern
H50.17	Alternating exotropia with V pattern
H50.18	Alternating exotropia with other noncomitancies
H50.21	Vertical strabismus, right eye
H50.22	Vertical strabismus, left eye
H50.311	Intermittent monocular esotropia, right eye
H50.312	Intermittent monocular esotropia, left eye
H50.32	Intermittent alternating esotropia
H50.331	Intermittent monocular exotropia, right eye
H50.332	Intermittent monocular exotropia, left eye
H50.34	Intermittent alternating exotropia
H50.411	Cyclotropia, right eye
H50.412	Cyclotropia, left eye
H50.42	Monofixation syndrome
H50.43	Accommodative component in esotropia
H50.51	Esophoria
H50.52	Exophoria
H50.53	Vertical heterophoria
H50.54	Cyclophoria
H50.55	Alternating heterophoria
H50.611	Brown's sheath syndrome, right eye
H50.612	Brown's sheath syndrome, left eye
H50.69	Other mechanical strabismus
H50.811	Duane's syndrome, right eye
H50.812	Duane's syndrome, left eye
H50.89	Other specified strabismus
H51.11	Convergence insufficiency
H51.12	Convergence excess
H51.8	Other specified disorders of binocular movement
H52.01	Hypermetropia, right eye

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ICD-10-CM Diagnosis Codes	Description
H52.02	Hypermetropia, Left eye
H52.03	Hypermetropia, bilateral
H52.11	Myopia, right eye
H52.12	Myopia, left eye
H52.13	myopia, bilateral
H52.4	Presbyopia
H52.511	Internal ophthalmoplegia (complete) (total), right eye
H52.512	Internal ophthalmoplegia (complete) (total), left eye
H52.513	Internal ophthalmoplegia (complete) (total), bilateral
H53.011	Deprivation amblyopia, right eye
H53.012	Deprivation amblyopia, left eye
H53.013	Deprivation amblyopia, bilateral
H53.021	Refractive amblyopia, right eye
H53.022	Refractive amblyopia, left eye
H53.023	Refractive amblyopia, bilateral
H53.031	Strabismic amblyopia, right eye
H53.032	Strabismic amblyopia, left eye
H53.033	Strabismic amblyopia, bilateral
H53.041	Amblyopia suspect, right eye
H53.042	Amblyopia suspect, left eye
H53.043	Amblyopia suspect, bilateral

IX. REFERENCES

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1. *Handler SM, Fierson WM, American Academy of Ophthalmology Section on Ophthalmology and Council on Children with Disabilities, et al. Learning disabilities, dyslexia, and vision. Pediatrics. Mar 2011;127(3):e818-856. PMID 21357342*
2. *Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Orthoptic training for the treatment of learning disabilities. TEC Assessments. 1996;Volume 11:Tab 2.*
3. *Rawstron JA, Burley CD, Elder MJ. A systematic review of the applicability and efficacy of eye exercises. J Pediatr Ophthalmol Strabismus. Mar-Apr 2005;42(2):82-88. PMID 15825744*
4. *Scheiman M, Gwiazda J, Li T. Non-surgical interventions for convergence insufficiency. Cochrane Database Syst Rev. Mar 16 2011(3):CD006768. PMID 21412896*

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5. *Convergence Insufficiency Treatment Trial Study Group. Randomized clinical trial of treatments for symptomatic convergence insufficiency in children. Arch Ophthalmol. Oct 2008;126(10):1336-1349. PMID 18852411*
6. *Convergence Insufficiency Treatment Trial Study Group. Long-term effectiveness of treatments for symptomatic convergence insufficiency in children. Optom Vis Sci. Sep 2009;86(9):1096-1103. PMID 19668097*
7. *Scheiman M, Cotter S, Kulp MT, et al. Treatment of accommodative dysfunction in children: results from a randomized clinical trial. Optom Vis Sci. Nov 2011;88(11):1343-1352. PMID 21873922*
8. *Borsting E, Mitchell GL, Kulp MT, et al. Improvement in academic behaviors after successful treatment of convergence insufficiency. Optom Vis Sci. Jan 2012;89(1):12-18. PMID 22080400*
9. *Barnhardt C, Cotter SA, Mitchell GL, et al. Symptoms in children with convergence insufficiency: before and after treatment. Optom Vis Sci. Oct 2012;89(10):1512-1520. PMID 22922781*
10. *Scheiman M, Cotter S, Rouse M, et al. Randomised clinical trial of the effectiveness of base-in prism reading glasses versus placebo reading glasses for symptomatic convergence insufficiency in children. Br J Ophthalmol. Oct 2005;89(10):1318-1323. PMID 16170124*
11. *Scheiman M, Mitchell GL, Cotter S, et al. A randomized clinical trial of treatments for convergence insufficiency in children. Arch Ophthalmol. Jan 2005;123(1):14-24. PMID 15642806*
12. *Shin HS, Park SC, Maples WC. Effectiveness of vision therapy for convergence dysfunctions and long-term stability after vision therapy. Ophthalmic Physiol Opt. Mar 2011;31(2):180-189. PMID 21309805*
13. *Dusek WA, Pierscionek BK, McClelland JF. An evaluation of clinical treatment of convergence insufficiency for children with reading difficulties. BMC Ophthalmol. Aug 11 2011;11:21. PMID 21835034*
14. *Lee SH, Moon BY, Cho HG. Improvement of vergence movements by vision therapy decreases K-ARS scores of symptomatic adhd children. J Phys Ther Sci. Feb 2014;26(2):223-227. PMID 24648636*
15. *Momeni-Moghaddam H, Kundart J, Azimi A, et al. The effectiveness of home-based pencil push-up therapy versus office-based therapy for the treatment of symptomatic convergence insufficiency in young adults. Middle East Afr J Ophthalmol. Jan-Mar 2015;22(1):97-102. PMID 25624682*
16. *Borsting E, Mitchell GL, Arnold LE, et al. Behavioral and emotional problems associated with convergence insufficiency in children: an open trial. J Atten Disord. Oct 2016;20(10):836-844. PMID 24271946*
17. *Stein JF, Richardson AJ, Fowler MS. Monocular occlusion can improve binocular control and reading in dyslexics. Brain. Jan 2000;123(Pt 1):164-170. PMID 10611130*

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18. Christenson GN, Griffin JR, Taylor M. Failure of blue-tinted lenses to change reading scores of dyslexic individuals. *Optometry*. Oct 2001;72(10):627-633. PMID 11712629
19. Ramsay MW, Davidson C, Ljungblad M, et al. Can vergence training improve reading in dyslexics? *Strabismus*. Dec 2014;22(4):147-151. PMID 25333204
20. Grisham D, Powers M, Riles P. Visual skills of poor readers in high school. *Optometry*. Oct 2007;78(10):542-549. PMID 17904495
21. Palomo-Alvarez C, Puell MC. Accommodative function in school children with reading difficulties. *Graefes Arch Clin Exp Ophthalmol*. Dec 2008;246(12):1769-1774. PMID 18751994
22. Ponsonby AL, Williamson E, Smith K, et al. Children with low literacy and poor stereoacuity: an evaluation of complex interventions in a community-based randomized trial. *Ophthalmic Epidemiol*. Sep-Oct 2009;16(5):311-321. PMID 19874111
23. American Academy of Pediatrics, Council on Children with Disabilities, American Academy of Ophthalmology, et al. Joint statement--Learning disabilities, dyslexia, and vision. *Pediatrics*. Aug 2009;124(2):837-844. PMID 19651597
24. Blue Cross Blue Shield Association Medical Policy Reference Manual. 9.03.03, Orthoptic Training for the Treatment of Vision or Learning Disabilities. March 2018.

Concussion

- Evans RW. Concussion and mild traumatic brain injury. UpToDate Inc., Waltham, MA. Last reviewed February 2016a.
- Evans RW. Postconcussion syndrome. In: UpToDate Online Journal [serial online]. Waltham, MA: UpToDate; updated August 22, 2018. [Website]: www.uptodate.com. Accessed September 21, 2018.
- Harmon KG, Drezner JA, Gammons M, et al. American Medical Society for Sports Medicine Position Statement: Concussion in Sport. *Br J Sports Med*. 2013; 47(1):15-26.
- Meehan WP, III, O'Brien MJ. Concussion in children and adolescents: Management. UpToDate Online Journal [serial online]. Waltham, MA: UpToDate; updated September 5, 2018. [Website]: www.uptodate.com. Accessed September 21, 2018.

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MP 4.007	CAC 7/27/04
	CAC 8/30/05
	CAC 9/26/06
	CAC 11/28/06
	CAC 11/27/07
	CAC 11/25/08
	7/1/09 Cross-Reference added for Pervasive Developmental Disorders

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	CAC 11/24/09 Consensus Review – Policy statement unchanged, references updated.
	CAC 11/30/10 Consensus Review
	CAC 7/26/11 Minor revision. Policy statement added that orthoptic eye exercises are not medically necessary for the treatment of learning disabilities. Also added a statement that orthoptic eye exercises are investigational for all other indications including slow reading. Background information updated.
	CAC 1/29/13 Consensus review. References updated; no changes to policy statements.
	04/05/2013- Removed code 92060
	CAC 11/25/14 Consensus review. No change to policy statements. Policy guidelines and rationale added. References updated. Coding reviewed 11/13/2014
	CAC 11/24/15 Consensus review. No change to the policy statements. Rationale and reference update. Coding Reviewed
	Admin update 1/1/17: Product variation section updated. New diagnosis codes added effective 10/1/16.
	CAC 9/27/16 Minor revision. Problems related to concussion was added as an investigational indication. References and rationale updated. FEP variation revised to reflect change in age from 18 to 21 for coverage of treatment of amblyopia and strabismus. Coding reviewed.
	CAC 7/25/17 Minor revision. A statement was added that vision therapy to improve symptomatic convergence insufficiency in those younger than 9 or older than 17 years of ages is considered not medically necessary. The following statement was moved from the policy guidelines to the policy section: Up to 12 sessions of office-based vergence/accommodative therapy, typically performed once per week, has been shown to improve symptomatic convergence insufficiency in children aged 9 to 17 years. If patients remain symptomatic after 12 weeks of orthoptic training, alternative interventions should be considered. References and rationale updated. Coding Reviewed.
	9/21/18 Consensus review. Policy statements unchanged. Description/Background, Rationale and Reference sections updated.

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