

# MEDICAL POLICY



MEDICAL POLICY DETAILS	
Medical Policy Title	Vision Therapy
Policy Number	9.01.04
Category	Contract Clarification
Original Effective Date	10/18/01
Committee Approval Date	10/18/01, 04/24/03, 02/19/04, 02/17/05, 11/17/05, 02/22/07, 12/13/07
Current Effective Date	11/21/24
Archived Date	12/11/08
Archive Review Date	12/10/09, 12/09/10, 12/08/11, 12/06/12, 10/24/13, 12/11/14, 12/10/15, 12/08/16, 12/14/17, 12/13/18, 12/12/19, 12/10/20, 12/16/21, 11/17/22, 11/16/23, 11/21/24
Product Disclaimer	<ul style="list-style-type: none"> <li>• Services are contract dependent; if a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.</li> <li>• If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit.</li> <li>• 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.</li> <li>• 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.</li> <li>• If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.</li> </ul>

## POLICY STATEMENT

- I. Based upon our criteria and assessment of the peer-reviewed literature, vision therapy that includes orthoptics and occlusion therapy has been medically proven to be effective and, therefore, is considered **medically appropriate** for the treatment of amblyopia.
- II. Based upon our criteria and assessment of the peer-reviewed literature, vision therapy that includes prism adaptation has been medically proven to be effective and, therefore, is considered **medically appropriate** when utilized for acquired esotropia prior to surgical intervention.
- III. Based upon our criteria and assessment of the peer-reviewed literature, vision therapy has been medically proven to be effective and, therefore, is considered **medically appropriate** for the treatment of *convergence insufficiency*.
- IV. Based upon our criteria and the lack of peer-reviewed literature, vision therapy has not been medically proven to be effective and, therefore, is considered **investigational** for indications that include, but are not limited to, the following:
  - A. all other accommodative and vergence dysfunctions, such as: fusional vergence dysfunction, divergence excess, convergence excess, divergence insufficiency, vertical phorias, basic exophoria, basic esophoria, accommodative insufficiency, sustained accommodation, accommodative infacility, and spasm accommodation (see statement III above on coverage of convergence insufficiency);
  - B. low vision;
  - C. myopia;
  - D. nystagmus;
  - E. presbyopia;
  - F. strabismus, including esotropia (with the exception of acquired esotropia as stated above) and exotropia; and
  - G. age-related macular degeneration.

## Medical Policy: VISION THERAPY

Policy Number: 9.01.04

Page: 2 of 5

- V. Based upon our criteria and assessment of the peer-reviewed literature, vision therapy does not improve patient outcomes and, therefore, is considered **investigational** for learning disabilities; including attention deficit hyperactivity disorder (ADHD) and dyslexia.
- VI. Based upon our criteria and lack of the peer-reviewed literature, vision therapy using web-based and/or digital programming/therapeutics has not been medically proven to be effective and, therefore, is considered **investigational** (e.g., Luminopia, RevitalVision, CureSight-CS100).

### DESCRIPTION

Vision therapy (also known as visual therapy, visual training, vision training, or eye training) involves a range of treatment modalities that include the use of lenses, prisms, filters, optometric phototherapy (syntonics), occlusion therapy (eye patching), behavioral modalities, and eye exercises (orthoptics, pleoptics). The therapeutic goal of vision therapy is to correct or improve specific visual dysfunctions. Vision therapy is performed in an optometrist's or ophthalmologist's office one to two times weekly for a number of months, with additional home exercises done as reinforcement.

Luminopia is a software-only digital therapeutic designed to be used with commercially available Head-Mounted Displays (HMDs). Luminopia is indicated for improvement in visual acuity in amblyopia patients and is intended to be used as an adjunct to full-time refractive correction, such as glasses, which should also be worn under the HMD during Luminopia therapy. Their proprietary software uses a dual-action mechanism taking the content, modifying it in real-time, and presenting it differently to each eye to rebalance the input to the brain. The contrast of the stronger eye image is reduced to encourage the brain to pay more attention to the weaker eye and complementary masks remove parts of each eye's image, teaching the brain to combine input from both eyes.

RevitalVision is a perceptual learning vision training software program that aims to improve the brain's visual processing and vision in amblyopic individuals. Training is done while the dominant eye is blurred with a semi-transparent white cover. By improving the brain's visual processing to perform better, it compensates for some blurry images caused by small refractive error and allows patients to see better without correction.

CureSight-CS100 (NovaSight) is a digital eye tracking treatment using a special device and red-blue treatment glasses. The treatment is carried out while the child watches any streamed content of choice at home, under the remote supervision of an eye care provider and a dedicated Monitoring Center. By tracking the gaze position of both eyes in real-time, the CureSight system blurs the center of vision of the dominant eye and provides the amblyopic eye with a normal sharp image. This stimulates the visual system to use the information coming from the amblyopic eye to process the fine details, improving its acuity and developing stereoacuity as the eyes learn to work together.

### RATIONALE

Most studies evaluating the efficacy of vision therapy for visual disorders are small. In general, these studies are poorly designed, with significant methodological flaws, and the data derived from them are relatively weak and inconclusive. There is some evidence to support the use of vision therapy that involves occlusion as a treatment for amblyopia (treatment success with patching are 72.3% -79%) and vision therapy that involves prism adaptation prior to surgery administered as a treatment for acquired esotropia (surgical success rates for prism adaptation prior to surgery are 89% versus 72% for patients receiving no prism therapy). Large, well-designed studies comparing vision therapy with other treatment modalities, standardization of outcome measurements, and the criteria for defining patient selection are needed to adequately evaluate vision therapy for visual dysfunctions.

A number of optometrists advocate vision therapy for patients with learning disabilities, including dyslexia, claiming that, while vision therapy does not treat these disorders directly, it may improve visual efficiency and visual processing to allow the individual to be more responsive to educational instruction. This rationale for the use of vision therapy as a treatment for reading disabilities is unproven. While research suggests a relationship between oculomotor efficiency and reading skills, other studies have found that reading skills are related to language skills, and oculomotor ability is not the principal cause of reading disability. There is a scarcity of quality data on the efficacy of vision therapy for treating dyslexia and other reading and learning disabilities. Most of these study results were found to be inconsistent, and the studies, themselves, were flawed by serious design limitations (e.g., small sample sizes, poorly defined patient criteria).

## Medical Policy: VISION THERAPY

Policy Number: 9.01.04

Page: 3 of 5

The use of digital programs (e.g., Luminopia, RevitalVision, CureSight-CS100) have been proposed for the treatment of amblyopia. Overall, the literature supporting its use consists of randomized trials with small sample sizes and short term outcomes. Larger studies comparing digital programs to a relevant comparator with longer follow-ups are needed. The available evidence is insufficient to evaluate the effect of its use on health outcomes.

### 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).

#### CPT Codes

Code	Description
92065	Orthoptic training; performed by a physician or other qualified health care professional
92066	Orthoptic training; under supervision of a physician or other qualified health care professional
0687T (E/I)	Treatment of amblyopia using an online digital program; device supply, educational set-up, and initial session
0688T (E/I)	Treatment of amblyopia using an online digital program; assessment of patient performance and program data by physician or other qualified health care professional, with report, per calendar month.

Copyright © 2024 American Medical Association, Chicago, IL

#### HCPCS Codes

Code	Description
A9292 (E/I)	Prescription digital visual therapy, software-only, FDA cleared, per course of treatment

#### ICD10 Codes

Code	Description
H51.11-H51.12	Convergence insufficiency and excess (code range)
H53.001-H53.039	Amblyopia (code range)

### REFERENCES

\*Al-Karmi R, et al. Image relocation with prisms in patients with age-related macular degeneration. Can J Ophthalmol 2006 Jun;41(3):313-8.

\*American Academy of Ophthalmology. Amblyopia Preferred Practice Pattern®. 2022 Dec – Updated 2024 [<https://www.aao.org/education/preferred-practice-pattern/amblyopia-ppp-2022>] accessed 09/26/24.

\*American Academy of Ophthalmology. Esotropia and Exotropia Preferred Practice Pattern. 2022 Dec [<https://www.aao.org/education/preferred-practice-pattern/esotropia-exotropia-ppp>] accessed 09/26/24.

\*American Academy of Ophthalmology. Joint Statement: Learning Disabilities, Dyslexia, and Vision. 2014 Jul [<https://www.aao.org/clinical-statement/joint-statement-learning-disabilities-dyslexia-vis>] accessed 09/26/24.

## Medical Policy: VISION THERAPY

Policy Number: 9.01.04

Page: 4 of 5

- \*American Academy of Ophthalmology. Joint Technical Report: Learning Disabilities, Dyslexia, and Vision. 2011 Mar [<https://www.aaopt.org/clinical-statement/joint-technical-report-learning-disabilities-dysle>] accessed 09/26/24.
- \*American Academy of Ophthalmology. Vision Rehabilitation Preferred Practice Pattern. 2022 Dec [<https://www.aaopt.org/education/preferred-practice-pattern/vision-rehabilitation-ppp-2022>] accessed 09/26/24.
- \*American Academy of Pediatrics. Clinical practice guideline: treatment of the school-aged child with attention deficit/hyperactivity disorder. Clinical practice guideline. 2001 Oct;108(4):1033-44.
- \*American Optometric Association. Clinical practice guideline. Care of the patient with accommodative and vergence dysfunction. Revised 2010. [<https://www.aoa.org/AOA/Documents/Practice%20Management/Clinical%20Guidelines/Consensus-based%20guidelines/Care%20of%20Patient%20with%20Accommodative%20and%20Vergence%20Dysfunction.pdf>]. accessed 09/26/24.
- \*American Optometric Association. Clinical practice guideline. Care of the patient with amblyopia. Reviewed 2004. [<https://www.aoa.org/AOA/Documents/Practice%20Management/Clinical%20Guidelines/Consensus-based%20guidelines/Care%20of%20Patient%20with%20Amblyopia.pdf>] accessed 09/26/24.
- \*American Optometric Association. Clinical practice guideline. Care of the patient with learning related vision problems. Revised 2008. [<https://www.aoa.org/AOA/Documents/Practice%20Management/Clinical%20Guidelines/Consensus-based%20guidelines/Care%20of%20Patient%20with%20Learning%20Related%20Vision%20Problems.pdf>]. accessed 09/26/24.
- \*American Optometric Association. Clinical practice guideline. Care of the patient with strabismus: esotropia and exotropia. Revised 2010. [<https://www.aoa.org/AOA/Documents/Practice%20Management/Clinical%20Guidelines/Consensus-based%20guidelines/Care%20of%20Patient%20with%20Strabismus%20Esotropia%20and%20Exotropia.pdf>]. accessed 09/26/24.
- \*Bouldoukian J, et al. Randomized controlled trial of the effect of colored overlays on the rate of reading of people with specific learning disabilities. Ophthalmic Physiol Opt 2002 Jan;22(1):55-60.
- \*Brautaset R, et al. Accommodation insufficiency in children: are exercises better than reading glasses? Strabismus 2008 Apr-Jun;16(2):65-9.
- \*Gallaway M, et al. The effectiveness of pencil pushups treatment for convergence insufficiency: a pilot study. Optom Vis Sci 2002 Apr;79(4):265-67.
- \*Handler SM, et al. Learning disabilities, dyslexia, and vision. Pediatrics 2011 Mar;127(3):e818-56.
- \*Helveston EM. Visual training: current status in ophthalmology. Am J Ophthalmol 2005 Nov;140(5):903-10.
- \*Leiba H, et al. Long-term follow-up of occlusion therapy in amblyopia. Ophthalmol 2001 Sep;108(9):1552-5.
- \*Pediatric Eye Disease Investigator Group, et al. A randomized trial of atropine vs patching for treatment of moderate amblyopia: follow-up at age 10 years. Arch Ophthalmol 2008 Aug;126(8):1039-44.
- \*Scheiman M, et al. A survey of treatment modalities for convergence insufficiency. Optom Vis Sci 2002 Mar;79(3):151-157.
- \*Scheiman M, et al. A randomized clinical trial of treatments for convergence insufficiency in children. Arch Ophthalmol 2005 Jan;123(1):14-24.
- \*Scheiman M, et al. Randomized trial of treatment of amblyopia in children aged 7 to 17 years. Arch Ophthalmol 2005 Apr;123(4):437-47.
- \*Scheiman M, et al. A randomized clinical trial of vision therapy/ orthoptics versus pencil pushups for the treatment of convergence insufficiency in young adults. Optom Vis Sci 2005 Jul;82(7):583-95.

**Medical Policy: VISION THERAPY**

**Policy Number: 9.01.04**

**Page: 5 of 5**

\*Schotton K, et al. Interventions of strabismic amblyopia. Cochrane Database Syst Rev 2008 Apr 16;(2):CD006461.

\*Smith HJ, et al. A randomized controlled trial to determine the effectiveness of prism spectacles for patients with age-related macular degeneration. Arch Ophthalmol 2005 Aug;123(8):1042-50.

\*The Pediatric Eye Disease Investigator Group. A randomized trial of atropine vs patching for treatment of moderate amblyopia in children. Arch Ophthalmol 2002 Mar;120:268-78.

\*Key Article

**KEY WORDS**

Acquired esotropia, Amblyopia, Convergence insufficiency, Orthoptics.

**CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS**

Based on our review, vision therapy is not addressed in National or Regional Medicare coverage determinations or policies.