

POLICY TITLE	SENSORY INTEGRATION THERAPY AND AUDITORY INTEGRATION THERAPY
POLICY NUMBER	MP 8.011

CLINICAL BENEFIT	 ☑ MINIMIZE HARMFUL OR INEFFECTI □ ASSURE APPROPRIATE LEVEL OF □ ASSURE APPROPRIATE DURATION 	 MINIMIZE SAFETY RISK OR CONCERN. MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS. ASSURE APPROPRIATE LEVEL OF CARE. ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS. ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET. 		
	□ ASSURE APPROPRIATE SITE OF T	REATMENT OR SERVICE.		
Effective Date:	7/1/2025			
POLICY	PRODUCT VARIATIONS	DESCRIPTION/BACKGROUND		
<u>RATIONALE</u>	DEFINITIONS	BENEFIT VARIATIONS		
DISCLAIMER	CODING INFORMATION	<u>REFERENCES</u>		
POLICY HISTORY				

I. POLICY

Sensory integration therapy and auditory integration therapy are considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Note: Investigational status does not apply to members/groups whose benefits are subject to the terms mandated in Pennsylvania Act 62 of 2008.

Cross-References:

MP 2.304 Autism Spectrum Disorders MP 8.001 Investigational Physical Medicine and Specialized Physical Medicine Interventions (Outpatient) MP 8.007 Cognitive Rehabilitation

II. **PRODUCT VARIATIONS**

This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations as discussed in Section VI. Please see additional information below.

FEP PPO - Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at: <u>https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies</u>

III. DESCRIPTION/BACKGROUND

The goal of sensory integration therapy (SIT) is to improve how the brain processes and adapts to sensory information, as opposed to teaching specific skills. Therapy usually involves activities

<u>Тор</u>

Тор



	SENSORY INTEGRATION THERAPY AND AUDITORY INTEGRATION THERAPY
POLICY NUMBER	MP 8.011

that provide vestibular, proprioceptive, and tactile stimuli, which are selected to match specific sensory processing deficits of the child. For example, swings are commonly used to incorporate vestibular input, while trapeze bars and large foam pillows or mats may be used to stimulate somatosensory pathways of proprioception and deep touch. Tactile reception may be addressed through a variety of activities and surface textures involving light touch.

Auditory integration therapy (AIT; also known as auditory integration training, auditory enhancement training, audio-psycho-phonology) involves having individuals listen to music modified to remove frequencies to which they are hypersensitive, with the goal of gradually increasing exposure to sensitive frequencies. Although several methods of AIT have been developed, the most widely described is the Berard method, which involves two half-hour sessions per day separated by at least three hours, over 10 consecutive days, during which patients listen to recordings. AIT has been proposed for individuals with a range of developmental and behavioral disorders, including learning disabilities, autism spectrum disorder, pervasive developmental disorder, and attention-deficit/hyperactivity disorder. Other methods include the Tomatis method, which involves listening to electronically modified music and speech, and Samonas Sound Therapy, which involves listening to filtered music, voices, and nature sounds.

Regulatory Status

SIT is a procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration. No devices designed to provide AIT have been cleared for marketing by the Food and Drug Administration.

IV. RATIONALE

TOP

SUMMARY OF EVIDENCE

For individuals who have developmental disorders who receive SIT, the evidence includes systematic reviews of randomized controlled trials and case series. Relevant outcomes are functional outcomes and quality of life. Due to the individualized approach to SIT and the large variations in patients' disorders, large multicenter RCTs are needed to evaluate the efficacy of this intervention. The most direct evidence on SIT outcomes derives from several small, randomized trials. Although some of these trials demonstrated improvements for subsets of outcomes measured, they had small sample sizes, heterogeneous patient populations, and variable outcome measures. A randomized controlled trial of 138 children ages 4 to 11 years published in 2022 found that sensory integration therapy for children with autism and sensory processing difficulties did not demonstrate clinical benefit above standard care. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have developmental disorders who receive AIT, the evidence includes systematic reviews of randomized controlled trials. Relevant outcomes are functional outcomes and quality of life. For AIT, the largest body of literature relates to its use in autism spectrum disorder. Several systematic reviews of AIT in the treatment of autism have found limited



POLICY TITLE	SENSORY INTEGRATION THERAPY AND AUDITORY INTEGRATION THERAPY
POLICY NUMBER	MP 8.011

evidence to support its use. No comparative studies identified evaluated use of AIT for other conditions. The evidence is insufficient to determine the effects of the technology on health outcomes.

V. **DEFINITIONS**

PROPRIOCEPTION is the mechanism involved in the self-regulation of posture and movement through stimuli originating in the receptors imbedded in the joints, tendons, muscles, and labyrinth.

SOMATOSENSORY is considered one of the five traditional senses also known as touch. The impression of touch is formed from several modalities. In medicine, the colloquial term touch is usually replaced with somatic senses to better reflect the variety of mechanisms involved.

VI. DISCLAIMER

Capital Blue Cross' medical policies are used to determine coverage for specific medical technologies, procedures, equipment, and services. These medical policies do not constitute medical advice and are subject to change as required by law or applicable clinical evidence from independent treatment guidelines. Treating providers are solely responsible for medical advice and treatment of members. These polices are not a guarantee of coverage or payment. Payment of claims is subject to a determination regarding the member's benefit program and eligibility on the date of service, and a determination that the services are medically necessary and appropriate. Final processing of a claim is based upon the terms of contract that applies to the members' benefit program, including benefit limitations and exclusions. If a provider or a member has a question concerning this medical policy, please contact Capital Blue Cross' Provider Services or Member Services.

VII. CODING INFORMATION

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.

Investigational; therefore, not covered:

Procedure	Codes			
97533				

<u>Тор</u>

Тор

Тор



POLICY TITLE	SENSORY INTEGRATION THERAPY AND AUDITORY INTEGRATION THERAPY
POLICY NUMBER	MP 8.011

VIII. REFERENCES

TOP

- 1. Sinha Y, Silove N, Hayen A, et al. Auditory integration training and other sound therapies for autism spectrum disorders (ASD). Cochrane Database Syst Rev. Dec 07 2011; 2011(12): CD003681. PMID 22161380
- 2. Schaaf RC, Burke JP, Cohn E, et al. State of measurement in occupational therapy using sensory integration. Am J Occup Ther. 2014; 68(5): e149-53. PMID 25184475
- 3. Mailloux Z, May-Benson TA, Summers CA, et al. Goal attainment scaling as a measure of meaningful outcomes for children with sensory integration disorders. Am J Occup Ther. 2007; 61(2): 254-9. PMID 17436848
- 4. Parham LD, Cohn ES, Spitzer S, et al. Fidelity in sensory integration intervention research. Am J Occup Ther. 2007; 61(2): 216-27. PMID 17436844
- Weitlauf AS, Sathe N, McPheeters ML, et al. Interventions Targeting Sensory Challenges in Autism Spectrum Disorder: A Systematic Review. Pediatrics. Jun 2017; 139(6). PMID 28562287
- Case-Smith J, Weaver LL, Fristad MA. A systematic review of sensory processing interventions for children with autism spectrum disorders. Autism. Feb 2015; 19(2): 133-48. PMID 24477447
- 7. May-Benson TA, Koomar JA. Systematic review of the research evidence examining the effectiveness of interventions using a sensory integrative approach for children. Am J Occup Ther. 2010; 64(3): 403-14. PMID 20608272
- 8. Randell E, Wright M, Milosevic S, et al. Sensory integration therapy for children with autism and sensory processing difficulties: the SenITA RCT. Health Technol Assess. Jun 2022; 26(29): 1-140. PMID 35766242
- Corbett BA, Shickman K, Ferrer E. Brief report: the effects of Tomatis sound therapy on language in children with autism. J Autism Dev Disord. Mar 2008; 38(3): 562-6. PMID 17610057
- 10. Mudford OC, Cross BA, Breen S, et al. Auditory integration training for children with autism: no behavioral benefits detected. Am J Ment Retard. Mar 2000; 105(2): 118-29. PMID 10755175
- 11. Porges SW, Bazhenova OV, Bal E, et al. Reducing auditory hypersensitivities in autistic spectrum disorder: preliminary findings evaluating the listening project protocol. Front Pediatr. 2014; 2: 80. PMID 25136545
- 12. Brondino N, Fusar-Poli L, Rocchetti M, et al. Complementary and Alternative Therapies for Autism Spectrum Disorder. Evid Based Complement Alternat Med. 2015; 2015: 258589. PMID 26064157
- 13. Zimmer M, Desch L, Rosen LD, et al. Sensory integration therapies for children with developmental and behavioral disorders. Pediatrics. Jun 2012; 129(6): 1186-9. PMID 22641765
- 14. Susan L. Hyman, Susan E. Levy, Scott M. Myers, COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS, Dennis Z. Kuo, Susan Apkon, Lynn F. Davidson, Kathryn A.



POLICY TITLE	SENSORY INTEGRATION THERAPY AND AUDITORY INTEGRATION THERAPY
POLICY NUMBER	MP 8.011

Ellerbeck, Jessica E.A. Foster, Garey H. Noritz, Mary O'Connor Leppert, Barbara S. Saunders, Christopher Stille, Larry Yin, Carol C. Weitzman, David Omer Childers, Jack M. Levine, Ada Myriam Peralta-Carcelen, Jennifer K. Poon, Peter J. Smith, Nathan Jon Blum, John Ichiro Takayama, Rebecca Baum, Robert G. Voigt, Carolyn Bridgemohan; Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. Pediatrics January 2020; 145 (1): e20193447. 10.1542/peds.2019-3447

- Occupational Therapy for Children and Youth Using Sensory Integration Theory and Methods in School-Based Practice. Am J Occup Ther. 2015; 69 Suppl 3: 6913410040p1-6913410040p20. PMID 26713950
- 16. Watling R, Koenig KP, Davies PL, et al. Occupational therapy practice guidelines for children and adolescents with challenges in sensory processing and sensory integration. Bethesda, MD: American Occupational Therapy Association Press; 2011
- 17. American Speech-Language-Hearing Association, Working Group in AIT. Auditory Integration Training [Technical Report:]. 2004
- 18. Blue Cross Blue Shield Association Medical Policy Reference Manual. 8.03.13, Sensory Integration and Auditory Integration Therapy. April 2024

IX. POLICY HISTORY

<u>Top</u>

MP 8.011	02/26/2020 Consensus Review. No changes to coding or policy statement.
	05/19/2021 Consensus Review . No change to policy statement. References updated.
	04/05/2022 Consensus Review. No change to policy statement. Coding table
	format updated. FEP language updated.
	04/27/2023 Consensus Review. No change to policy statement. Rationale
	updated. References reviewed and updated. No coding change.
	02/08/2024 Consensus Review. No change to policy statement. References updated. Coding reviewed, no change.
	01/17/2025 Consensus Review. No change to policy statement. References updated. Coding reviewed, no change.
	06/04/2025 Administrative Update. Removing the Benefit Variations and updating the Disclaimer.

<u>Top</u>

Health care benefit programs issued or administered by Capital Blue Cross and/or its subsidiaries, Capital Advantage Insurance Company[®] and Keystone Health Plan[®] Central. Independent licensees of the Blue Cross and Blue Shield Association. Communications issued by Capital Blue Cross in its capacity as administrator of programs and provider relations for all companies.