

Policy: MP177

Section: Medical Benefit Policy

Subject: Sensory Integration Therapy

Applicable line of business:

Commercial	x	Medicaid	x
Medicare	x	ACA	x
CHIP	x		

I. Policy: Sensory Integration Therapy

II. Purpose/Objective:

To provide a policy of coverage regarding Sensory Integration Therapy

III. Responsibility:

- A. Medical Directors
- B. Medical Management

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

Commercial

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicare

Geisinger Gold Medicare Advantage HMO, PPO, and HMO D-SNP plans are offered by Geisinger Health Plan/Geisinger Indemnity Insurance Company, health plans with a Medicare contract. Continued enrollment in Geisinger Gold depends on contract renewal. Geisinger Health Plan/Geisinger Indemnity Insurance Company are part of Geisinger, an integrated health care delivery and coverage organization.

CHIP

Geisinger Health Plan Kids (GHP Kids) is a Children's Health Insurance Program (CHIP) offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicaid

Geisinger Health Plan Family (GHP Family) is a Medical Assistance (Medicaid) insurance program offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care — that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age

Sensory integration therapy (SIT) is intended to improve one's ability to process and integrate sensory information and provide a basis for improved independence and participation in daily life activities. Performed by an occupational/ physical therapist, the therapy combines sensory stimulation with purposeful muscle activities, which is thought to provide the patient with opportunities to engage in activities rich in tactile, vestibular, and proprioceptive sensations. It is believed that this process will result in improved behavior and academic performance.

EXCLUSIONS:

The Plan does **NOT** provide coverage for *Sensory Integration Therapy* for any indication including but not limited to various communication, behavioral, emotional and learning disorders (unless otherwise mandated under Act 62)* because it is considered **unproven**. The Geisinger Technology Assessment Committee evaluated this technology and concluded that there is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this test on health outcomes when compared to established tests or technologies.

There is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of Suit Therapy (including but not limited to the Adeli Suit and TheraTogs®) for the treatment of any condition, including but not limited to sensory integration disorders and other neuromuscular conditions.

The available studies of sensory integration are of poor design, poorly controlled and with methodological flaws making the outcomes inconclusive. These trials fail to demonstrate that sensory integration therapy provides long term improvement in individuals with neurological development and behavioral development issues. Additionally, there is no data from well-designed studies that indicate sensory integration for other medical conditions improves patient outcomes. The evidence is insufficient to determine the effects on net health outcomes and therefore is considered investigational.

The use of SIT lacks support from many professional organizations. The American Academy of Pediatrics' position statement on "Sensory integration therapies for children with developmental and behavioral disorders" states, "parents should be informed that the amount of research regarding the effectiveness of sensory integration therapy is limited and inconclusive". The American Academy of Child and Adolescent Psychiatry (AACAP)'s practice parameter states, "Studies of sensory oriented interventions, such as auditory integration training, sensory integration therapy, and touch therapy/massage, have contained methodologic flaws and have yet to show replicable improvements". Therefore, the Plan does **NOT** provide coverage for Suit Therapy (unless otherwise mandated under Act 62)* because it is considered to be **unproven**.*

- A complete description of Suit Therapy is outlined in MP181 – Suit Therapy.

*For additional information please see MP 232 - Autism Spectrum Disorder – Evaluation and Medical Management

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in **MP 15 - Experimental Investigational or Unproven Services or Treatment.**

Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis

CODING ASSOCIATED WITH: *Sensory Integration Therapy*

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

97533 Sensory integrative technique to enhance sensory processing and promote adaptive responses to environmental demand, direct (one-to-one) patients contact by the provider, each 15 minutes.

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:

Geisinger Technology Assessment Committee Triage Group. Sensory Integration Therapy. April 11, 2006.

Sensory Integration International (SII) [Web site]. Answers to frequently asked questions. 2004a. Available at: <http://www.sensoryint.com/faq.html>. Accessed December 2, 2004.

HAYES Medical Technology Directory™. Sensory Integration Therapy for Children with Learning Disabilities or Developmental Delays. Lansdale, PA: HAYES, Inc.; ©2003 Winifred S. Hayes. Updated December 20,2005.

ECRI. Sensory Integration Therapy for Fragile X Syndrome, Autism, Attention Deficit Disorder, and Developmental Delay. [Hotline Response]Current as of 11 May 2004.

Hoehn TP, Baumeister AA. A critique of the application of sensory integration therapy to children with learning disabilities. J Learn Disabil. 1994 Jun-Jul;27(6):338-50.

Schaaf RC, Miller LJ. Occupational therapy using a seonsry integrative approach for children with developmental disabilities. MRDD Research Reviews 2005;11:143-148.

Michaud LJ; Committee on Children With Disabilities. Prescribing therapy services for children with motor disabilities. Pediatrics [serial online]. 2004 Jun;13(6):1836-8. American Academy of Pediatrics (AAP) Policy. Accessed Jan 3, 2005. Available at URL address:

Kaplan BJ, Polatajko HJ, Wilson BN, Faris PD. Reexamination of sensory integration: a combination of two efficacy studies. J Learn Disabil. 1993 May;26(5):342-7.

Barbarese WJ, Katusic SK, Voigt RG. Autism – A review of the state of the science for pediatric primary health care clinicians. Arch Pediatr Adolesc Med. 2006;160:1167-1175.

Wuang YP, Wang CC, Huang MH, et al. Prospective study of the effect of sensory integration, neurodevelopmental treatment, and perceptual-motor therapy on the sensorimotor performance in children with mild mental retardation. Am J Occup Ther. 2009 Jul-Aug;63(4):441-52.

American Academy of Audiology. Position statement: Auditory integration training. Reston, VA: American Academy of Audiology; October 2010. Available at: <http://www.asha.org/policy/PS2004-00218/> Accessed March 11, 2015.

Section On Complementary And Integrative Medicine; Council on Children with Disabilities; American Academy of Pediatrics, Zimmer M, Desch L. Sensory integration therapies for children with developmental and behavioral disorders. *Pediatrics*. 2012;129(6):1186-1189.

Volkmar F, Siegel M, Woodbury-Smith M, et al; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. *J Am Acad Child Adolesc Psychiatry*. 2014;53(2):237-257.

Watling R, Hauer S. Effectiveness of Ayres sensory integration® and sensory-based interventions for people with autism spectrum disorder: A systematic review. *Am J Occup Ther*. 2015;69(5):6905180030p1-12.

Leong HM, Carter M, Stephenson J. Systematic review of sensory integration therapy for individuals with disabilities: Single case design studies. *Res Dev Disabil*. 2015;47:334-351.

Case-Smith J, Weaver LL, Fristad MA. A systematic review of sensory processing interventions for children with autism spectrum disorders. *Autism*. 2015;19(2):133-148.

UpToDate. Laura Weissman M.D., Carolyn Bridgemohan M.D. Autism Spectrum Disorders in Children and Adolescents: Complementary and Alternative Therapies. Topic last updated November 15, 2016

Pfeiffer B, Clark GF, Arbesman M. Effectiveness of cognitive and occupation-based interventions for children with challenges in sensory processing and integration: a systematic review. *Am J Occup Ther*. 2018 Jan/Feb;72(1):7201190020p1-7201190020 p9.

Bodison SC, Parham LD. Specific sensory techniques and sensory environmental modifications for children and youth with sensory integration difficulties: a systematic review. *Am J Occup Ther*. 2018 Jan/Feb;72(1):7201190040p1 - 7201190040 p11.

Kilroy E, Aziz-Zadeh L, Cermak S. Ayres Theories of Autism and Sensory Integration Revisited: What Contemporary Neuroscience Has to Say. *Brain Sci*. 2019 Mar 21;9(3). pii: E68.

Kashefimehr B, Kayihan H, Huri M. The effect of sensory integration therapy on occupational performance in children with autism. *OTJR* 2018 Apr;38(2):75-83.

Camarata S, Miller LJ, Wallace MT, et al. Evaluating sensory integration/sensory processing treatment: Issues and analysis. *Front Integr Neurosci*. 2020;14:556660.

Wuang Y-P, Huang C-L, Tsai H-Y, et al. Sensory integration and perceptual-motor profiles in school-aged children with autistic spectrum disorder. *Neuropsychiatr Dis Treat*. 2020;16:1661-1673.

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*. 2022 Jun;26(29):1-140.

Omairi C, Mailloux Z, Antoniuk SA, et al. Occupational therapy using Ayres sensory integration®: a randomized controlled trial in Brazil. *Am J Occup Ther*. 2022 Jul 1;76(4):7604205160

This policy will be revised as necessary and reviewed no less than annually.

Devised: 04/12/06

Revised: 11/09 (Act 62 Language); 10/24 (revise unproven language)

Reviewed: 10/07, 11/10, 11/11, 11/12, 11/13, 11/14, 11/15, 11/16, 10/17, 10/18, 10/19, 10/20, 10/21, 10/22, 10/23

CMS UM Oversight Committee Approval: 12/23, 12/24

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at <https://www.geisinger.org/health-plan/providers/ghp-clinical-policies>

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.