Policy Number	**THE803.020**
Policy Effective Date	**12/15/2024**

Sensory Integration Therapy and Auditory Integration Therapy

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Disclaimer

Carefully check state regulations and/or the member contract.
Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Legislative Mandates

EXCEPTION: For Illinois only: Illinois Public Act 103-0458 [Insurance Code 215 ILCS 5/356z.61] (HB3809 Impaired Children) states all group or individual fully insured PPO, HMO, POS plans amended, delivered, issued, or renewed on or after January 1, 2025 shall provide coverage for therapy, diagnostic testing, and equipment necessary to increase quality of life for children who have been clinically or genetically diagnosed with any disease, syndrome, or disorder that includes low tone neuromuscular impairment, neurological impairment, or cognitive impairment.

Coverage

Sensory integration therapy and auditory integration therapy **are considered experimental, investigational and/or unproven.**

Policy Guidelines

NOTE 1: Sensory or auditory integration therapy could be considered a component of cognitive rehabilitation therapy and therefore coverage may be mandated by the Texas legislature. See HCSC medical policy THE803.019 for more information on Cognitive Rehabilitation.

NOTE 2: Sensory or auditory integration therapy may involve the diagnoses of autism, mental retardation/intellectual disability, and learning disabilities which may be subject to legislative mandates for all plans. Please review and apply legislation carefully. See HCSC medical policy PSY301.014 for more information on Autism Spectrum Disorders (ASD).

Description

Sensory integration therapy has been proposed as a treatment of developmental disorders in patients with established dysfunction of sensory processing, particularly autism spectrum disorder. Sensory integration therapy may be offered by occupational and physical therapists who are certified in sensory integration therapy. Auditory integration therapy uses gradual exposure to certain types of sounds to improve communication in a variety of developmental disorders, particularly autism.

Background

The goal of sensory integration therapy is to improve how the brain processes and adapts to sensory information, as opposed to teaching specific skills. Therapy usually involves activities 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 (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 auditory integration therapy have been developed, the most widely described is the Berard method, which involves 2 half-hour sessions per day separated by at least 3 hours, over 10 consecutive days, during which patients listen to recordings. Auditory integration therapy 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. (1)

Regulatory Status

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

Rationale

Medical policies assess the clinical evidence to determine whether the use of a technology improves the net health outcome. Broadly defined, health outcomes are the length of life, quality of life, and ability to function including benefits and harms. Every clinical condition has specific outcomes that are important to patients and to managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is a balance of benefits and harms.

To assess whether the evidence is sufficient to draw conclusions about the net health outcome of a technology, 2 domains are examined: the relevance and the quality and credibility. To be relevant, studies must represent 1 or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions, the alternative will be supportive care or surveillance. The quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial (RCT) is preferred to assess efficacy; however, in some circumstances, nonrandomized studies may be adequate. Randomized controlled trials are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

Sensory Integration Therapy (SIT)

Clinical Context and Therapy Purpose

The purpose of sensory integration therapy in individuals who have developmental disorders is to provide a treatment option that is an alternative to or an improvement on existing therapies.

The following PICO was used to select literature to inform this policy.

Populations

The relevant population of interest is individuals with developmental disorders.

Interventions

The treatment being considered is the use of sensory integration therapy. The treatment sessions are often provided as part of a comprehensive occupational therapy or cognitive rehabilitation therapy and may last for more than 1 year.

Comparators

The following practices are currently being used to treat developmental disorders: specialized developmentally appropriate interventions for specific developmental disorders.

Outcomes
The general outcomes of interest are functional outcomes and quality of life. Follow-up of at least 6 months would be desirable to assess outcomes.

Schaaf et al. (2014) published an overview of current measurement issues in sensory integration. (2) These authors proposed several changes to the outcomes used in sensory integration research, as follows:

- "Additional measures … to ensure a comprehensive assessment of the sensory and motor factors that may be influencing function and participation"
- "Assessment measures … to address a wider age range"
- Neurophysiologic studies
- "Fidelity to the core principles of sensory integration therapy"
- "Studies … to evaluate the dosage of therapy to understand the best candidates for intervention and the appropriate intensity and frequency of intervention"
- "Outcomes that are meaningful to clients and sensitive to the changes observed after intervention."

The Sensory Processing Disorders Scientific Workgroup (2007) has also discussed the methodologic challenges of conducting intervention effectiveness studies of dynamic interactional processes, the lack of scientific evidence to support current practice, and methods for improving the quality of research in this area. (3, 4)

Study Selection Criteria
Methodologically credible studies were selected using the following principles:

- To assess efficacy outcomes, comparative controlled prospective trials were sought, with a preference for RCTs.
- In the absence of such trials, comparative observational studies were sought, with a preference for prospective studies.
- To assess long-term outcomes and adverse events, single-arm studies that capture longer periods of follow-up and/or larger populations were sought.
- Studies with duplicative or overlapping populations were excluded.

Systematic Reviews
Several systematic reviews have addressed the use of sensory integration therapy in various clinical conditions (Tables 1 and 2). Two of the 3 systematic reviews included in this evidence review pertain to studies evaluating sensory integration therapy for autism spectrum disorder (ASD), (5, 6) while 1 included studies in individuals with a broader range of developmental disabilities. (7)

Table 1. Comparison of Studies Included in Systematic Reviews of Sensory Integration Therapy

Study	Weitlauf et al. (2017) (5)	Case-Smith et al. (2015) (6)	May-Benson et al. (2010) (7)
RCTs			
Carte et al. (1984)			•
Fazlioðlu et al. (2008)	•	•	
Grimwood et al. (1980)			•
Humphries et al. (1990)			•
Humphries et al. (1992)			•
Humphries et al. (1993)			•
Iwanaga et al. (2014)	•		
Miller et al. (2007)			•
Morrison et al. (1986)			•
Schaaf et al. (2013)	•	•	
Pfeiffer et al. (2011)	•	•	
Piravej et al. (2009)			
Polatajko et al. (1991)			•
Reilly et al. (1983)			
Werry et al. (1990)			•
White (1979)			•
Wilson et al. (1992)			•
Wilson et al. (1994)			•
Woo et al. (2013)			
Ziviani et al. (1982)			•
Other Study Designs			
Allen et al. (1995)			•
Ayres (1972)			•
Ayres (1977)			•
Bagatell et al. (2010)		•	
Bullock et al. (1978)			•
Bundy et al. (2007)			•
Candler et al. (2003)			•
Case-Smith et al. (1999)			•
Cox et al. (2009)		•	
Davis et al. (2011)		•	
Devlin et al. (2009)		•	
Devlin et al. (2011)		•	
Fertel-Daly (2001)		•	
Hodgetts et al. (2010)		•	
Hodgetts et al. (2011)		•	
Kane et al. (2004)		•	
Kinnealey et al. (2012)			

Leemrijse et al. (2000)			•
Leew et al. (2010)		•	
Linderman et al. (1999)			•
Miller et al. (2007)			•
Ottenbacher et al. (1979)			•
Ottenbacher et al. (1982)			•
Quigley et al. (2011)			
Reichow et al. (2010)		•	
Roberts et al. (2007)			•
Schaaf et al. (2012)		•	
Schilling et al. (2004)		•	
Schreoder et al. (1982)			•
Smith et al. (2005)		•	
Thompson et al. (2011)			
Umeda et al. (2011)			
Van Rie et al. (2009)		•	
Watling et al. (2007)			
Watling et al. (2010)		•	
Wuang et al. (2010)			

RCTs: randomized controlled trials.

Table 2. Characteristics of Systematic Reviews of Sensory Integration Therapy

Study	Search Dates	Studies	Populations
Weitlauf et al. (2017) (5)	2010-2016	3 RCTs, 1 other design	ASD
Case-Smith et al. (2015) (6)	2000-2012	2 RCTs, 1 other design	ASD
May-Benson et al. (2010) (7)	1972-2007	13 RCTs, 14 other designs	Children with difficulty processing and integrating sensory information

ASD: autism spectrum disorder; RCT: randomized controlled trial.

In a systematic review conducted for the Agency for Healthcare Research and Quality (AHRQ), Weitlauf et al. (2017) evaluated the effectiveness and safety of a variety of interventions targeting sensory challenges in ASD. (5) The reviewers included 3 RCTs and 1 retrospective cohort study of sensory integration-based approaches, defined as interventions using combinations of sensory and kinetic components, such as materials with different textures, touch/massage, swinging and trampoline exercises, and balance and muscle resistance exercises. One study was rated low risk of bias, 1 moderate, and 2 high risk of bias. Significant heterogeneity across studies in interventions and outcome measures precluded meta-analysis. In 3 of 4 studies, sensory-related measures and motor skills measures improved for children

receiving the sensory integration-based intervention, however the strength of this evidence was rated low due to small sample sizes and short study durations. The studies were also limited by a lack of blinding when parent-reported outcome measures were used. The reviewers concluded, "Although some therapies may hold promise and warrant additional study, substantial needs exist for continuing improvements in methodologic rigor in the field."

Case-Smith et al. (2015) updated a systematic review on sensory processing interventions, including sensory integration therapy, which they defined as clinic-based interventions that use sensory-rich, child-directed activities to improve a child's adaptive responses to sensory experiences, and sensory-based interventions (defined as adult-directed sensory modalities applied to the child to improve behaviors associated with modulation disorders), for children with ASD with concurrent sensory processing problems. (6) This review was designed to focus on interventions that activate the somatosensory and vestibular systems for patients with ASD with co-occurring sensory processing problems. Nineteen studies published since 2000 were included, 5 of which evaluated sensory integration therapy in patients with ASD and sensory processing disorders. Two studies reviewed were RCTs; both were small (n=20 and n=17 in the sensory integration therapy groups). Reviewers noted the studies showed low or low-to-moderate effects and concluded that "It is premature to draw conclusions as to whether sensory integration therapy for children with ASD, which is designed to support a child's intrinsic motivation and sense of internal control, is ultimately effective."

May-Benson and Koomar (2010) published a systematic review of sensory integration therapy, identifying 27 research studies (13 randomized trials) that met their inclusion criteria. (7) Most studies had been performed with children who had learning or reading disabilities. There were 2 case reports/small series on the effect of sensory integration therapy in children with ASD. Reviewers concluded that although the sensory integration approach might result in positive outcomes, findings were limited because of small sample sizes, variable intervention dosages, lack of fidelity to interventions, and selection of outcomes that might not be meaningful or might not change with the treatment provided.

Randomized Controlled Trial

The SENsory Integration Therapy for sensory processing difficulties in children with Autism spectrum disorder (SenITA) RCT was published more recently and not included in the systematic reviews discussed above (Table 3). The trial was funded by the National Institute for Health and Care Research (UK) and reported by Randell et al. (2022). (8) A total of 138 children ages 4 to 11 years with an autism diagnosis or sensory processing difficulties were randomized to Ayres Sensory Integration® therapy delivered in 26 1-hour sessions over 26 weeks (intensive phase), followed by 2 sessions per month for 2 months and then 1 telephone session per month for 2 months (tailoring phase). The comparator was usual care, which was defined as awaiting services or receiving sensory-based intervention not meeting fidelity criteria for sensory integration. Outcomes were measured at 6 and 12 months post randomization. The primary outcome was irritability/agitation (as measured by the corresponding Aberrant Behavior Checklist subscale), indicative of challenging behavior, at 6 months. Secondary outcomes included other problem behaviors, adaptive behaviors and functioning, socialization, caregiver

stress, and quality of life. Outcome assessors were blinded to treatment allocation. Study limitations are shown in Tables 4 and 5.

Sensory integration therapy did not demonstrate clinical benefit above standard care (adjusted mean difference between groups on the primary outcome 0.40 [95% CI, -2.33 to 3.14; p=.77]). No main intervention effects were observed, and sensitivity analyses did not alter the interpretation of results. Subgroup analyses suggest that sensory integration therapy may work better for boys and those with a comorbid diagnosis of ADHD. However, these subgroup analyses were exploratory and not powered to detect effects.

Table 3. Randomized Controlled Trial of Sensory Integration Therapy in Children with Autism and Sensory Processing Difficulties- Characteristics

Study	Location	Inclusion/Exclusion Criteria	Intervention	Comparator	Main Results
Randell et al. (2022) (8)	England and Wales	Children ages 4 to 11 years with a diagnosis of autism or probable or likely autism (defined as undergoing assessment); in mainstream primary education; definite or probable SPDs Exclusions: currently undergoing or had previously undergone SIT or applied behavior analysis therapy Recruitment via services and self-referral	n=69 Ayres Sensory Integration therapy delivered in 26 1-hour sessions over 26 weeks 2 sessions per week for 10 weeks (intensive phase), followed by 2 sessions per month for 2 months and then 1 telephone session per month for 2 months (tailoring phase)	n=69 Usual care, defined as awaiting services or receiving sensory-based intervention not meeting fidelity criteria for sensory integration	Primary Outcome (irritability/agitation at 6 months on Aberrant Behavior Checklist): Mean score: Usual care 18.8 (SD 10.48) Intervention 18.5 (SD 9.33) Adjusted mean difference between groups 0.40 (95% CI, -2.33 to 3.14; p=.77) Conclusions from primary analyses unaffected by sensitivity analyses accounting for missing data, intervention receipt (i.e., dose), or the COVID-19 pandemic.

					No evidence of meaningful intervention effects was found at 6 or 12 months across behavioral, adaptive functioning, socialization, caregiver stress, health utility, or quality-of-life measures.

CI: confidence interval; SD: standard deviation; SPD: sensory processing difficulties.

Table 4. Study Relevance Limitations

Study	Population[a]	Intervention[b]	Comparator[c]	Outcomes[d]	Duration of Follow-up[e]
Randell et al. (2022) (8)	4. The population was representative of children within autism services, although girls and minority ethnic boys were likely to be under-represented in both the current study and the wider population of children diagnosed with autism	5. Delivery of the intervention varied across regions			

The study limitations stated in this table are those notable in the current literature review; this is not a comprehensive gaps assessment.

[a] Population key: 1. Intended use population unclear; 2. Study population is unclear; 3. Study population not representative of intended use; 4, Enrolled populations do not reflect relevant diversity; 5. Other.

[b] Intervention key: 1. Not clearly defined; 2. Version used unclear; 3. Delivery not similar intensity as comparator; 4. Not the intervention of interest (e.g., proposed as an adjunct but not tested as such); 5:

Other.
[c] Comparator key: 1. Not clearly defined; 2. Not standard or optimal; 3. Delivery not similar intensity as intervention; 4. Not delivered effectively; 5. Other.
[d] Outcomes key: 1. Key health outcomes not addressed; 2. Physiologic measures, not validated surrogates; 3. Incomplete reporting of harms; 4. Not establish and validated measurements; 5. Clinically significant difference not prespecified; 6. Clinically significant difference not supported; 7. Other.
[e] Follow-Up key: 1. Not sufficient duration for benefit; 2. Not sufficient duration for harms; 3. Other.

Table 5. Study Design and Conduct Limitations

Study	Allocation[a]	Blinding[b]	Selective Reporting[c]	Data Completeness[d]	Power[e]	Statistical[f]
Randell et al. (2022) (8)				7. Caregiver-reported goal performance not measured in control arm		

The study limitations stated in this table are those notable in the current literature review; this is not a comprehensive gaps assessment.
[a] Allocation key: 1. Participants not randomly allocated; 2. Allocation not concealed; 3. Allocation concealment unclear; 4. Inadequate control for selection bias; 5. Other.
[b] Blinding key: 1. Participants or study staff not blinded; 2. Outcome assessors not blinded; 3. Outcome assessed by treating physician; 4. Other.
[c] Selective Reporting key: 1. Not registered; 2. Evidence of selective reporting; 3. Evidence of selective publication; 4. Other.
[d] Data Completeness key: 1. High loss to follow-up or missing data; 2. Inadequate handling of missing data; 3. High number of crossovers; 4. Inadequate handling of crossovers; 5. Inappropriate exclusions; 6. Not intent to treat analysis (per protocol for noninferiority trials); 7. Other.
[e] Power key: 1. Power calculations not reported; 2. Power not calculated for primary outcome; 3. Power not based on clinically important difference; 4. Other.
[f] Statistical key: 1. Analysis is not appropriate for outcome type: (a) continuous; (b) binary; (c) time to event; 2. Analysis is not appropriate for multiple observations per patient; 3. Confidence intervals and/or p values not reported; 4. Comparative treatment effects not calculated; 5. Other.

Section Summary: Sensory Integration Therapy

The most direct evidence related to outcomes from sensory integration therapy comes from randomized trials and systematic reviews of these trials. Although certain studies demonstrated some improvements on subsets of the outcomes measured, the studies were limited by small sample sizes, heterogeneous patient populations, and variable outcome measures. A RCT 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. As a result, the evidence is not sufficiently robust to draw conclusions about the effects of, and the most appropriate patient populations for, sensory integration therapy.

Auditory Integration Therapy (AIT)

Clinical Context and Therapy Purpose

The purpose of auditory integration therapy in individuals who have developmental disorders is to provide a treatment option that is an alternative to or an improvement on existing therapies.

The following PICO was used to select literature to inform this policy.

Populations
The relevant population of interest is individuals with developmental disorders. Although auditory integration therapy has been proposed as a therapy for a number of neurobehavioral disorders, the largest body of evidence, including systematic reviews, relates to its use in ASD.

Interventions
The treatment being considered is the use of auditory integration therapy. Auditory integration therapy 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.

Comparators
The following practices are currently being used to treat developmental disorders: specialized interventions for specific developmental disorders.

Outcomes
The general outcomes of interest are functional outcomes and quality of life. Follow-up of at least 6 months would be desirable to assess outcomes.

Study Selection Criteria
Methodologically credible studies were selected using the following principles:

- To assess efficacy outcomes, comparative controlled prospective trials were sought, with a preference for RCTs.
- In the absence of such trials, comparative observational studies were sought, with a preference for prospective studies.
- To assess long-term outcomes and adverse events, single-arm studies that capture longer periods of follow-up and/or larger populations were sought.
- Studies with duplicative or overlapping populations were excluded.

Systematic Reviews
In their systematic review of sensory interventions conducted for AHRQ, Weitlauf et al. (2017) included 4 RCTs of auditory integration therapy. (5) Two small, short-term RCTs with moderate risk of bias reported no significant differences between auditory integration and control groups in language outcomes assessed on parent, teacher, and clinician observation measures. (9, 10) Two other RCTs, reported in a single publication, reported some parent-rated improvement in hearing sensitivity, spontaneous speech, listening, and behavioral organization, but no difference in other behavioral domains rated. (11) Overall, the reviewers concluded that there is low strength evidence that auditory integration-based approaches do not improve language outcomes.

A Cochrane review (2011) evaluated auditory integration therapy along with other sound therapies for ASD. (1) Included were 6 RCTs on auditory integration therapy and 1 on Tomatis therapy, comprising a total of 182 subjects (age range, 3 to 39 years). For most trials, the control condition was listening to unmodified music for the same amount of time as the active treatment group. Allocation concealment was inadequate for all trials, and 5 trials had fewer than 20 participants. Meta-analyses could not be conducted. Three studies did not demonstrate any benefit of auditory integration therapy over control conditions, and 3 studies had outcomes of questionable validity or outcomes that were not statistically significant. Reviewers found no evidence that auditory integration therapy is an effective treatment for ASD; however, evidence was insufficient to prove that it is not effective.

In the systematic review examining complementary and alternative therapies for ASD, Brondino et al. (2015) (12) identified the same 6 RCTs of auditory integration therapy included in the 2011 Cochrane review. Like the Cochrane review, Brondino et al. (2015) concluded that the largest studies did not report improvements with auditory integration therapy.

Section Summary: Auditory Integration Therapy

The largest body of evidence on the use of auditory integration therapy relates to treatment of ASD. A 2011 Cochrane review found that studies of auditory integration therapy failed to demonstrate meaningful clinical improvements. No subsequent comparative studies of auditory integration therapy were identified.

Summary of Evidence

For individuals who have developmental disorders who receive sensory integration therapy, the evidence includes systematic reviews of randomized controlled trials (RCTs) and case series. Relevant outcomes are functional outcomes and quality of life. Due to the individualized approach to sensory integration therapy and the large variations in patients' disorders, large multicenter RCTs are needed to evaluate the efficacy of this intervention. The most direct evidence on sensory integration therapy outcomes derives from several RCTs. 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 RCT 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 that the technology results in an improvement in the net health outcome.

For individuals who have developmental disorders who receive auditory integration therapy, the evidence includes systematic reviews of RCTs. Relevant outcomes are functional outcomes and quality of life. For auditory integration therapy, the largest body of literature relates to its use in autism spectrum disorder. Several systematic reviews of auditory integration therapy in the treatment of autism have found limited evidence to support its use. No comparative studies identified evaluated use of auditory integration therapy for other conditions. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Practice Guidelines and Position Statements

American Academy of Pediatrics

A 2012 policy statement by the American Academy of Pediatrics on sensory integration therapy for children with developmental and behavioral disorders stated that "occupational therapy with the use of sensory-based therapies may be acceptable as one of the components of a comprehensive treatment plan. However, parents should be informed that the amount of research regarding the effectiveness of sensory integration therapy is limited and inconclusive." (13) The American Academy of Pediatrics indicated that these limitations should be discussed with parents, along with instructions on how to evaluate the effectiveness of a trial period of sensory integration therapy.

American Occupational Therapy Association

The 2015 American Occupational Therapy Association (AOTA) guidelines stated: "American Occupational Therapy Association (AOTA) recognizes sensory integration as one of several theories and methods used by occupational therapists and occupational therapy assistants working with children in public and private schools...to "enhanc[e] a person's ability to participate in life through engagement in everyday activities….When children demonstrate sensory, motor, or praxis deficits that interfere with their ability to access the general education curriculum, occupational therapy using a sensory integration approach is appropriate." (14)

In 2011, the AOTA published evidence-based occupational therapy practice guidelines for children and adolescents with challenges in sensory processing and sensory integration. (15) The AOTA gave a level C recommendation for sensory integration therapy for individual functional goals for children, for parent-centered goals, and for participation in active play in children with sensory processing disorder, and to address play skills and engagement in children with autism. A level C recommendation is based on "…weak evidence that the intervention can improve outcomes, and the balance of the benefits and harms may result either in a recommendation that occupational therapy practitioners routinely provide the intervention … or in no recommendation because the balance of the benefits and harm is too close to justify a general recommendation." Specific performance skills evaluated were motor and praxis skills, sensory-perceptual skills, emotional regulation, and communication and social skills. There was insufficient evidence to recommend sensory integration therapy for academic and psychoeducational performance (e.g., math, reading, written performance).

American Speech-Language-Hearing Association

In 2002, the American Speech-Language-Hearing Association Work Group on Auditory Integration Therapy concluded that auditory integration therapy has not met scientific standards for efficacy that would justify its practice by audiologists and speech-language pathologists. (16)

Ongoing and Unpublished Clinical Trials

A search of ClinicalTrials.gov in February 2024 did not identify any studies that would likely influence this policy.

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	97533
HCPCS Codes	None

*Current Procedural Terminology (CPT®) ©2023 American Medical Association: Chicago, IL.

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Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <https://www.cms.hhs.gov>.

Policy History/Revision

Date	Description of Change
12/15/2024	Document updated with literature review. Coverage unchanged. Reference 8 added; some removed.
12/01/2023	Reviewed. No changes.
06/01/2022	Document updated with literature review. Coverage unchanged. References 5, 10-12, and 16 added; others removed.
06/15/2021	Reviewed. No changes.

07/15/2020	Document updated with literature review. Coverage unchanged. Reference 18 added; others removed.
07/01/2019	Reviewed. No changes.
07/15/2018	Document updated with literature review. Coverage unchanged. No new references added.
07/15/2017	Reviewed. No changes.
11/01/2016	Document updated with literature review. Auditory integration therapy added to the coverage statement as an experimental, investigational, and/or unproven therapy. Title changed from Sensory Integration Therapy.
01/01/2015	Reviewed. No changes.
03/01/2013	Document updated with literature review. Coverage unchanged. This document is no longer scheduled for routine literature review and update.
12/01/2010	Document updated with literature review. Coverage unchanged.
09/01/2008	Revised/updated entire document
04/15/2006	Revised/updated entire document
10/01/2002	New medical document