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## Subject: Auditory and Sensory Integration Therapy

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

<a href="#">Position Statement</a>	<a href="#">Billing/Coding</a>	<a href="#">Reimbursement</a>	<a href="#">Program Exceptions</a>	<a href="#">Definitions</a>	<a href="#">Related Guidelines</a>
<a href="#">Other</a>	<a href="#">References</a>	<a href="#">Updates</a>			

### DESCRIPTION:

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

**Summary and Analysis of Evidence:** A randomized controlled trial by Randell et al 2022 to determine the clinical effectiveness and cost-effectiveness of sensory integration therapy for children with autism and sensory difficulties across behavioural, functional and quality-of-life outcomes. The intervention was manualised sensory integration therapy delivered over 26 weeks and the comparator was usual care. A total of 138 participants were randomised ( $n = 69$  per group). Usual care was significantly different from the intervention, which was delivered with good fidelity and adherence and minimal contamination and was associated with no adverse effects. Trial procedures and outcome measures were acceptable. Carers and therapists reported improvement in daily functioning. The primary analysis included 106 participants. There were no significant main effects of the intervention at 6 or 12 months. The adjusted mean difference between groups on the Aberrant Behavior Checklist - irritability at 6 months post randomisation was 0.40 (95% confidence interval -2.33 to 3.14;  $p = 0.77$ ). Subgroup differences in irritability/agitation at 6 months were observed for sex of child (intervention  $\times$  female = 6.42, 95% confidence interval 0.00 to 12.85;  $p = 0.050$ ) and attention deficit hyperactivity disorder (intervention  $\times$  attention deficit hyperactivity disorder = -6.77, 95% confidence interval -13.55 to -0.01;  $p = 0.050$ ). There was an effect on carer stress at 6 months by region (intervention  $\times$  South England = 7.01, 95% confidence interval 0.45 to 13.56;  $p = 0.04$ ) and other neurodevelopmental/genetic conditions (intervention  $\times$  neurodevelopmental/genetic condition = -9.53, 95% confidence interval -18.08 to -0.98;  $p = 0.030$ ). Carer-rated goal performance and satisfaction increased across sessions ( $p < 0.001$ ),

with a mean change of 2.75 (95% confidence interval 2.14 to 3.37) for performance and a mean change of 3.34 (95% confidence interval 2.63 to 4.40) for satisfaction. Health economic evaluation suggests that sensory integration therapy is not cost-effective compared with usual care alone. The authors concluded that the intervention did not demonstrate clinical benefit above standard care. Subgroup effects are hypothesis-generating only. The intervention is likely to be effective for individualised performance goals, although it is unclear whether effects were in addition to standard care or were maintained.

Auditory integration therapy was developed as a technique for improving abnormal sound sensitivity in individuals with behavioural disorders including autism spectrum disorders. Other sound therapies bearing similarities to auditory integration therapy include the Tomatis Method and Samonas Sound Therapy. The authors concluded that there is no evidence that auditory integration therapy or other sound therapies are effective as treatments for autism spectrum disorders. As synthesis of existing data has been limited by the disparate outcome measures used between studies, there is not sufficient evidence to prove that this treatment is not effective. However, of the seven studies including 182 participants that have been reported to date, only two (with an author in common), involving a total of 35 participants, report statistically significant improvements in the auditory intergration therapy group and for only two outcome measures (Aberrant Behaviour Checklist and Fisher's Auditory Problems Checklist). As such, there is no evidence to support the use of auditory integration therapy at this time. (Sinha et al 2011)

### **POSITION STATEMENT:**

Auditory integration training and sensory integration therapy is considered **experimental or investigational** for all indications. The evidence is insufficient to determine that auditory integration training and sensory integration therapy results in an improvement in the net health outcome.

### **BILLING/CODING INFORMATION:**

#### **CPT Coding:**

97533	Sensory integrative techniques to enhance sensory processing and promote adaptive responses to environmental demands, direct (one-on-one) patient contact, each 15 minutes ( <b>investigational</b> )
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### **REIMBURSEMENT INFORMATION:**

Refer to section entitled [POSITION STATEMENT](#).

### **PROGRAM EXCEPTIONS:**

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

**Medicare Advantage products:** No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline reviewed date.

The following Local Coverage Determination (LCD) reference article was reviewed on the last guideline review date: Billing and Coding: Speech-Language Pathology A57040 located at cms.gov.

The following Medicare benefit policy was reviewed on the last guideline review date: 40.4-Speech-Language Pathology Services located at cms.gov.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at [Coverage Protocol Exemption Request](#)

## DEFINITIONS:

No guideline specific definitions apply.

## RELATED GUIDELINES:

None applicable.

## OTHER:

Other names used to report auditory integration training and sensory integration therapy:

**Note:** The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

Auditory Integration Therapy  
Sensory Integration Training

## REFERENCES:

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## COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 04/25/24.

## **GUIDELINE UPDATE INFORMATION:**

02/15/04	New Medical Coverage Guideline.
02/15/05	Scheduled review, no change in coverage statement.
02/15/06	Revised when services are not covered; add ALL auditory integration programs to investigational statement, and updated references.
02/15/07	Scheduled review. No change in investigational status, and updated references.
06/15/07	Reformatted guideline.
02/15/08	Scheduled review. No change in position statement (investigational), and updated references.
02/15/09	Scheduled review. No change in position statement (investigational), and updated references.
02/15/10	Scheduled review. No change in position statement (experimental or investigational), and updated references.
05/11/14	Revision: Program Exceptions section updated.
11/01/15	Revision: ICD-9 Codes deleted.
05/15/17	Review; no change in position statement. Revised description. Updated references.
04/15/19	Review; added position statement for sensory integration therapy. Added code 97533. Updated references.
06/15/21	Review; revised position statement. Updated description and references.
12/15/22	Review; no change in position statement. Updated references.
05/22/23	Update to Program Exceptions section.
01/01/24	Position statement maintained.
05/15/24	Review; no change in position statement. Updated references.