

# **Sensory Integration Therapy and Auditory Integration Training (for New Mexico Only)**

**Related Policies** 

None

Policy Number: CS108NM.A Effective Date: July 1, 2024

Instructions for Use

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This Medical Policy only applies to the state of New Mexico.

# **Coverage Rationale**

For sensory integration therapy, refer to the New Mexico Managed Care Policy Manual.

Auditory Integration training is unproven and not medically necessary for treating any condition due to insufficient evidence of efficacy.

# **Applicable Codes**

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

| CPT Code | Description  |
|----------|--|
| 97533    | Sensory integrative techniques to enhance sensory processing and promote adaptive responses to environmental demands, direct (one-on-one) patient contact, each 15 minutes |

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# **Description of Services**

### **Auditory Integration Training**

AIT was developed as a technique for improving abnormal sound sensitivity in individuals with behavioral disorders or autism spectrum disorders (Sinya et al., 2011). The Berard AIT protocol requires that a participant listen to modulated music on a specific device using high quality headphones for a total of 10 hours, over 10 or 12 consecutive days under the supervision of a professionally trained AIT practitioner (AIT Institute, 2018).

### **Clinical Evidence**

### **Auditory Integration Training (AIT)**

There is limited published literature regarding AIT. The extant literature is limited to uncontrolled studies with small numbers of participants, and treatment protocols have not been standardized. Furthermore, safety concerns have been raised as this treatment may cause distress and/or damage hearing (American Academy of Audiology 2010). The efficacy and safety of this training has not been demonstrated by larger studies with comparison groups using standardized protocols.

The Agency for Healthcare Research and Quality (AHRQ) published an updated comparative review on interventions targeting sensory challenges in children with autism spectrum disorder (ASD). Inclusion criteria were studies comparing interventions incorporating sensory-focused modalities with alternative treatments or no treatment, and inclusion of at least 10 children with ASD ages 2–12 years. The authors extracted and summarized data qualitatively because of the significant heterogeneity, as well as the strength of evidence (SOE). In regard to auditory integration-based approaches which included evidence in 4 small RCTs (2 moderate and 2 high risk of bias), they concluded that these did not improve language outcomes (low SOE) (Weitlauf et al., 2017).

Sokhadze et al. (2016) conducted a study using Berard's technique of auditory integration training (AIT) to improve sound integration in children with autism. It was proposed that exposure to twenty 30-min AIT sessions (total 10 h of training) would result in improved behavioral evaluation scores, improve profile of cardiorespiratory activity, and positively affect both early [N1, mismatch negativity (MMN)] and late (P3) components of evoked potentials in auditory oddball task. Eighteen children with autism spectrum disorder (ASD) participated in the study. A group of 16 typically developing children served as a contrast group in the auditory oddball task. The study reflected a linear increase of heart rate variability measures and respiration rate. Comparison of evoked potential characteristics of children with ASD versus typically developing children revealed several group difference findings, more specifically, a delayed latency of N1 to rare and frequent stimuli, larger MMN: higher P3a to frequent stimuli, and at the same time delayed latency of P3b to rare stimuli in the autism group. Parental questionnaires demonstrated improvements in behavioral symptoms such as irritability, hyperactivity, repetitive behaviors, and other important behavioral domains. The authors concluded that the results of the study propose that more controlled research is necessary to document behavioral and psychophysiological changes resulting from Berard AIT and to provide explanation of the neural mechanisms of how auditory integration training may affect behavior and psychophysiological responses of children with ASD. The findings of this study need to be validated by larger, well-designed studies.

Sinha et al. (2011) conducted a systematic review to evaluate AIT and included 6 RTCs with 171 individuals with autism. Three RTCs did not demonstrate the benefit of AIT over control conditions. The remaining trials identified improvements at 3 months for the AIT group based on improvements of total mean scores for the Aberrant Behavior Checklist, which is of questionable validity. There were no reported significant adverse effects of AIT. The reviewers concluded that more research is needed to determine the effectiveness of AIT for autism.

# Clinical Practice Guidelines American Academy of Audiology (AAA)

A 2010 position statement by the AAA Task Force on Auditory Integration Training (AIT) concludes that AIT (by any name) is investigational. The Academy believes that prospective, systematic research of this technique is needed to demonstrate its efficacy.

# American Speech-Language-Hearing Association (ASHA)

The ASHA prepared an evidenced-based technical report regarding AIT (ASHA, 2004). They noted that, despite approximately one decade of practice, this method has not met scientific standards for efficacy and safety that would justify its inclusion as a mainstream treatment for a variety of communication, behavioral, emotional, and learning disorders.

### **National Institute for Health and Care Excellence (NICE)**

In a 2013 guidance document for the support and management of autism spectrum disorder in patients under 19 years of age, NICE states that auditory integration training to manage speech and language problems in children and young people with autism should not be used.

### U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

The equipment used for sensory integration therapy and auditory integration training is not considered medical in nature, and therefore, not regulated by the FDA.

### References

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# **Policy History/Revision Information**

| Date       | Summary of Changes |
|------------|--------------------|
| 07/01/2024 | New Medical Policy |

#### **Instructions for Use**

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this policy, please check the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual<sup>®</sup> criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.