This protocol considers this test or procedure investigational. If the physician feels this service is medically necessary, preauthorization is recommended.

The following protocol contains medical necessity criteria that apply for this service. The criteria are also applicable to services provided in the local Medicare Advantage operating area for those members, unless separate Medicare Advantage criteria are indicated. If the criteria are not met, reimbursement will be denied and the patient cannot be billed. Please note that payment for covered services is subject to eligibility and the limitations noted in the patient’s contract at the time the services are rendered.

### Description

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. Auditory integration therapy (AIT) uses gradual exposure to certain types of sounds to improve communication in a variety of developmental disorders, particularly autism.

### Summary of Evidence

The evidence for SIT in individuals who have developmental disorders includes multiple randomized controlled trials (RCTs) and systematic reviews of these trials. Relevant outcomes are functional outcomes and quality of life. Due to the individualized approach to SIT and the large variation in individual therapists and patients, large multicenter RCTs are needed to evaluate the efficacy of this intervention. The most direct evidence related to SIT outcomes is derived from several small randomized trials. Although some of the studies demonstrated improvements on subsets of outcomes measured, these studies have small sample sizes, heterogeneous patient populations, and variable outcome measures. The evidence is insufficient to determine the effects of the technology on health outcomes.

The evidence for AIT in individuals who have developmental disorders includes multiple RCTs and systematic reviews of these trials. Relevant outcomes are functional outcomes and quality of life. For AIT, the largest body of literature relates to its use in autism. Several systematic reviews of AIT in the treatment of autism found...
limited evidence to support its use. No comparative studies were identified that evaluate use of AIT for other conditions. The evidence is insufficient to determine the effects of the technology on health outcomes.

Policy
Sensory integration therapy and auditory integration therapy are considered investigational.

Medicare Advantage
Sensory integration therapy may be medically necessary for persons with acquired sensory problems resulting from head trauma, illness or acute neurologic events including cerebrovascular accidents.

Sensory integration therapy is not medically necessary for patients with progressive brain conditions without potential for functional adaptation.

Background
The goal of SIT is to improve the way 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.

Treatment sessions are usually delivered in a one-on-one setting by occupational therapists with special training from university curricula, clinical practice, and mentorship in the theory, techniques, and assessment tools unique to SIT. Two organizations currently offer certification for SIT; Sensory Integration International, a nonprofit branch of the Ayres Clinic in Torrance, California, and Western Psychological Services, a private organization that has a collaborative arrangement with University of Southern California (USC), Los Angeles, to offer SIT through USC’s Department of Occupational Science and Therapy. The sessions are often provided as part of a comprehensive occupational therapy or cognitive rehabilitation therapy and may last for more than one year.

Auditory integration therapy (AIT; also known as auditory integration training, auditory enhancement training, audio-psycho-phonology) is another method, which involves having individuals listen to music that has been 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.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 (FDA). No devices designed to provide auditory integration therapy have been cleared for marketing by FDA.
Related Protocol

Cognitive Rehabilitation

Services that are the subject of a clinical trial do not meet our Technology Assessment Protocol criteria and are considered investigational. For explanation of experimental and investigational, please refer to the Technology Assessment Protocol.

It is expected that only appropriate and medically necessary services will be rendered. We reserve the right to conduct prepayment and postpayment reviews to assess the medical appropriateness of the above-referenced procedures. Some of this protocol may not pertain to the patients you provide care to, as it may relate to products that are not available in your geographic area.

References

We are not responsible for the continuing viability of web site addresses that may be listed in any references below.

5. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Sensory integration therapy. TEC Assessment. 1999; Volume 14, Tab 22.
22. National Government Services, Inc. Local Coverage Determination (LCD): Outpatient Physical and Occupational Therapy Services (L33631), Revision Effective Date for services performed on or after 08/01/2016.