**Policy:** 200215

**Initial Effective Date:** 01/31/2002

**Annual Review Date:** 07/27/2020

**Last Revised Date:** 02/26/2021

**SUBJECT:** Auditory Brainstem Response Testing for Assessment of Hearing Loss

**Definition:** Auditory brainstem response (ABR) testing is a noninvasive method of evaluating how the brain responds to sound. ABR testing provides information about the inner ear and associated brain pathways and may be used to characterize the type and severity of hearing loss (HL). This test is routinely used to screen newborns for hearing disorders and may also be used with children or other individuals who have a difficult time with conventional behavioral methods or hearing screenings. ABR testing can also be used to assess other aspects of central nervous system dysfunction.

**Medical Necessity:** The Company considers ABR testing (CPT Codes 92650, 92651, 92652, and 92653) medically necessary and eligible for reimbursement providing that testing has been ordered by a physician (or qualified nonphysician practitioner, e.g., nurse practitioner or physician assistant) and will be performed by an audiologist or other qualified healthcare professional, and at least one of the following medical criteria is met:

- Testing will be used to distinguish cochlear and retrocochlear pathology in patients with abnormal findings on audiologic testing (pure tone audiometry, acoustic reflex testing with a measurement of reflex decay, and speech discrimination testing) and symptoms including but not limited to:
  - Asymmetrical or unilateral sensorineural HL; or
  - Asymmetrical high-frequency HL; or
  - Unilateral tinnitus; or
  - Unilateral or bilateral poor word recognition scores as compared with degree of sensorineural HL; or
  - Perceived distortion of sounds when peripheral hearing is essentially normal; or

- Patient has previous failed hearing screening, is unable to undergo conventional audiometry, or results of conventional audiometry would be unreliable. This includes but is not limited to newborn infants, young children, patients who are attempting to feign HL (i.e. malingering), developmentally delayed patients, or patients with dementia; or

- Testing will be used to evaluate suspected acoustic neuroma in patients for whom MRI is contraindicated or MRI results are equivocal; or

- Testing will be used to evaluate suspected auditory neuropathy spectrum disorder; or

- Testing will be used for baseline assessment prior to cochlear implantation or posterior fossa surgery; or

- Testing will be used for postoperative assessment following cochlear or auditory brainstem implantation; or

- Testing will be used to evaluate HL in patients with demyelinating diseases (e.g., multiple sclerosis);
AND

At least one of the following clinical conditions is present:

- Meningococcal retrobulbar neuritis
- Symptomatic neurosyphilis
- Lyme disease, unspecified
- Progressive multifocal leukoencephalopathy
- Mosquito-borne viral encephalitis, tick-borne viral encephalitis, and viral encephalitis transmitted by other and unspecified arthropods
- Herpes viral encephalitis
- Measles complicated by encephalitis
- Rubella encephalitis
- Human herpesvirus 6 encephalitis
- Other human herpesvirus encephalitis
- Malignant neoplasm of other and unspecified parts of the nervous system
- Malignant neoplasm of brain
- Malignant neoplasm of other and unspecified parts of the nervous system
- Secondary malignant neoplasm of brain and spinal cord
- Benign neoplasm of brain and other parts of nervous system
- Neoplasm of uncertain behavior of brain and spinal cord, meninges, and other and unspecified parts of nervous system
- Neoplasms of unspecified behavior of brain
- Conversion disorder
- Sequelae of inflammatory disease of central nervous system
- Hereditary ataxia
- Other degenerative disease of basal ganglia
- Hallervorden-Spatz disease – extrapyramidal and movement disorders in diseases classified elsewhere (G23.0 – G26)
- Multiple sclerosis
- Other demyelinating diseases of the central nervous system
- Transient cerebral ischemic attacks and related syndromes
- Trigeminal, facial, and other cranial nerve disorders, nerve root and plexus disorders, mononeuritis, neuropathy, and myoneural disorders
- Cerebral palsy
- Anoxic brain damage, not elsewhere classified
- Benign intracranial hypertension
- Compression of brain
- Cerebral edema
Disorders of the optic nerve and visual pathways
Visual disturbances
Multi-system degeneration of the autonomic nervous system
Optic papillitis, unspecified eye – unspecified optic neuritis (H46.00 – H46.9)
Disorders of vestibular function
Other disorders of ear and HL
Subarachnoid hemorrhage, intracerebral hemorrhage, other and unspecified intracranial hemorrhage, occlusion and stenosis of precerebral arteries, occlusion of cerebral arteries
Cerebral aneurysm, nonruptured
Hypertensive encephalopathy
Acute cerebrovascular insufficiency, cerebral ischemia and other cerebrovascular disease
Cerebral vasospasm and vasoconstriction
Newborn (suspected to be) affected by other complications of labor and delivery
Other disturbances of cerebral status of newborn
Encephalocele
Congenital reduction deformities of brain
Arnold-Chiari syndrome
Abnormal head movements – unspecified abnormal involuntary movements (R25.0 – R25.9)
Abnormality of gait, lack of coordination, and transient paralysis of limb
Dizziness and giddiness
Nonspecific abnormal results of function studies of peripheral nervous system and special senses
Injury to optic nerve and pathways
Injury to cranial nerve, spinal cord, nerve root(s), spinal plexus(es), and other nerves of trunk, peripheral nerve of shoulder girdle and upper limb, or peripheral nerve of pelvic girdle and lower limb, sequela
Concussion with prolonged loss of consciousness without return to pre-existing conscious level
Encounter for hearing examination following failed hearing screening
Encounter for health supervision of foundling and other healthy infant or child

NOTE: At this time, the evidence does not support the use of auditory steady state response (ASSR) testing as an alternative to ABR testing for the evaluation of retrocochlear pathology; ASSR testing may be helpful for confirming ABR test results.

Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member, and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results, and/or credentials of the provider ordering or performing a service. The Company also
reserves the right to modify, revise, change, apply, and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

NOTE: After reviewing the relevant documentation, the Company reserves the right to apply this policy to the procedure performed regardless of how the procedure was coded by the Provider.

Coverage may differ for Medicare Advantage plan members; please see any applicable national and/or local coverage determinations for details. This information may be available at the Centers for Medicare & Medicaid Services (CMS) website.
Sources of Information:


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<thead>
<tr>
<th>Applicable Code(s):</th>
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<tbody>
<tr>
<td>CPT: 92650, 92651, 92652, 92653</td>
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<tr>
<td>HCPCS: N/A</td>
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<tr>
<td>ICD10 Procedure Codes: N/A</td>
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