Local Coverage Determination (LCD): Vestibular Function Tests (L33966)

Contractor Information

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LCD Information

Document Information

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<td>L33966</td>
<td>For services performed on or after 10/01/2015</td>
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<td>L29305</td>
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Proposed LCD in Comment Period

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CMS National Coverage Policy

Language quoted from CMS National Coverage Determinations (NCDs) and coverage provisions in interpretive manuals are italicized throughout the Local Coverage Determination (LCD). NCDs and coverage provisions in interpretive manuals are not subject to the LCD Review Process (42 CFR 405.860[b] and 42 CFR 426 [Subpart D]). In addition, an administrative law judge may not review an NCD. See §1869(f)(1)(A)(i) of the Social Security Act.

Unless otherwise specified, italicized text represents quotation from one or more of the following CMS sources:

Title 42 of the Code of Federal Regulations, Section 410.32

CMS Manual System, Pub. 100-02, Medicare Benefit Policy Manual, Chapter 15, Section 50.4.1

CMS Manual System, Pub. 100-08, Program Integrity Manual, Chapter 13, Section 5.1

Coverage Guidance

Coverage Indications, Limitations, and/or Medical Necessity

The vestibular system is the system of balance and equilibrium. This system works with other sensorimotor systems in the body, such as our visual system and skeletal system, to check and maintain the position of our body at rest or in motion. The vestibuloocular reflex (VOR) is a reflex that acts at short latency to generate eye movements that compensate for head rotations in order to preserve clear vision during locomotion. The VOR is the most accessible gauge of vestibular function and forms the basis for many of the clinical tests used to evaluate balance function.

Vestibular function tests are tests of function. The tests are used to determine potential causes of balance disturbances, and help to determine if there is a problem with the vestibular portion of the brainstem and inner ear. The balance system depends on the inner ear, the eyes, and the muscles and joints to send information related to the body's movement and orientation in space. When there are problems with the inner ear or other parts of the balance system, the patient may present with symptoms of vertigo, dizziness, imbalance or other symptoms.

This Local Coverage Determination (LCD) will define the vestibular function tests and the criteria for coverage for procedure codes 92537, 92538, 92540 through 92547 only. This LCD does not address Computerized Dynamic Posturography (CDP) or Tympanometry. Please refer to those individual LCDs for coverage criteria.

Indications for vestibular function testing:

A complete picture of the patient is necessary to determine if diagnostic testing is warranted. A complete history, physical exam and review of medications must be performed before ordering diagnostic tests. These expected medical activities can often elicit a likely cause of the problem. A complete picture of the patient is necessary before testing decisions can be made. The test that would identify a common cause of balance problems should be conducted first, with progression in testing toward the least common cause of balance problems.

By performing the history and physical and medication review, the physician can often differentiate between vestibular and non-vestibular dizziness. The differentiation of the two is important because true spinning vertigo is often inner ear related and non-vertigo symptoms may be due to inner ear problems as well as central nervous system (CNS), cardiovascular, or systemic diseases or by medications that cause cardiovascular, CNS, or ototoxic symptoms. In the case where it is clearly evident that the symptoms are non-vestibular in nature, then vestibular testing should not be done. However, if the physician cannot definitively differentiate between the two and feels vestibular testing is justified, then the medical record should clearly support the need to proceed with vestibular testing.

Dizziness may support the medical necessity for hearing tests in the initial otolaryngologic evaluation of patients in whom general medical causes (i.e. anemia, cardiovascular, and metabolic disorders) have been excluded. However, since dizziness is a vague complaint, a diagnosis of dizziness alone does not qualify for coverage for vestibular function testing. There must be sufficient evaluation of the patient that vestibular testing is likely to contribute directly to the patient’s therapy.

Evaluating the VOR requires application of a vestibular stimulus and measurement of the resulting eye movements. Quantitative test of physiological processes under vestibular control can be useful in identifying the cause of the patient’s symptoms, confirming findings noted on the history and physical exam, planning therapeutic interventions and monitoring the response to those interventions.
A standard vestibular function test battery includes 1.) tests of visual ocular control; 2.) a careful search for pathologic nystagmus with fixation and with eyes open in darkness and with 3.) measurement of induced physiologic nystagmus.

The following vestibular function tests are covered under this LCD:

- 92537—Caloric vestibular test with recording, bilateral; bithermal (ie, one warm and one cool irrigation in each ear for a total of four irrigations)
- 92538— Caloric vestibular test with recording, bilateral; monothermal (ie, one irrigation in each ear for a total of two irrigations)
- 92540—Basic vestibular evaluation, includes spontaneous nystagmus test with eccentric gaze fixation nystagmus, with recording, positional nystagmus test, minimum of 4 positions, with recording, optokinetic nystagmus test, bidirectional foveal and peripheral stimulation, with recording, and oscillating tracking test, with recording
- 92541—Spontaneous nystagmus test, including gaze and fixation nystagmus, with recording. Ectronystagmography (ENG) electrodes or video goggles are placed and the patient is asked to look straight ahead, 30-45 degrees to the right and 30-45 degrees to the left. Recordings are made to detect spontaneous nystagmus.
- 92542—Positional nystagmus test, minimum four positions, with recording. The patient is placed in a variety of positions, including supine with head extended dorsally, left and right and sitting, in an attempt to induce nystagmus. With the patients eyes closed, an ENG recording is made or with the patients eyes wide open in total darkness a Videonystagmograpy (VNG) recording is made to detect nystagmus.
- 92544—Optokinetic nystagmus test, bidirectional, foveal or peripheral stimulation, with recording. This test is usually performed with moving LED lights, with the patient watching the movement of the lights to the right and left. ENG electrodes or VNG recordings are used to record nystagmus.
- 92545—Oscillating tracking test, with recording. With ENG electrodes or video goggles in place, the patient watches an LED light moving in a pendular motion. A recording is made of the eye tracking motion. The recording is then analyzed for smoothness.
- 92546—Sinusoidal vertical axis rotational testing. The patient is seated in a rotary chair with the head bent forward 30 degrees. ENG electrodes are placed or VNG goggles are placed to measure nystagmus while the chair is rotated with the patients eyes closed. A recording is made and studies to determine an abnormal labyrinthine response on one side or the other. Auto Head Rotation Tests, sometimes referred to as Active-Head Rotation Tests, should not be billed with this code; this test requires the use of a chair capable of rotating around a vertical axis. There are several models of an appropriate chair for this test. This test is NOT performed by having the patient sit or stand on any kind of substitute platform or surface. This test is not a head-shake test.
- 92547—Use of vertical electrodes (list separately in addition to code for primary procedure). ENG electrodes are placed to measure vertical and rotary nystagmus.

For the purpose of this LCD, both VNG and ENG are acceptable methods used to record findings from the abovementioned tests.

All diagnostic tests must be ordered by the physician who is treating the beneficiary, that is, the physician who furnishes a consultation or treats a beneficiary for a specific medical problem and who uses the results in the management of the beneficiary’s specific medical problem. Tests not ordered by the physician who is treating the beneficiary are not reasonable and necessary (42 CFR § 410.32). All diagnostic tests covered under section 1861(s)(3) of the Act and payable under the physician fee schedule must be furnished under the appropriate level of supervision by a physician as defined in section 1861(r) of the Act. Services provided without the appropriate level of supervision are not reasonable and necessary.

Audiology tests are covered as "other diagnostic tests" under section 1861(s)(3) or 1861(s)(2)(C) of the Act in the physician’s office or hospital outpatient settings, respectively, when a physician (or an NPP, as applicable) orders such testing for the purpose of obtaining information necessary for the physician’s diagnostic medical evaluation or to determine the appropriate medical or surgical treatment of a hearing deficit or related medical problem. If a beneficiary undergoes diagnostic testing performed by an audiologist without a physician order, the tests are not
covered even if the audiologist discovers a pathologic condition.

See Pub. 100-02, Chapter 15, Section 80.3 for a complete discussion on audiological diagnostic testing requirements, including ordering, performing coverage and payment.

Vestibular Function Tests [92540 through 92547] may be covered when performed only by a qualified audiologist, with a physician’s order, or the physician treating the patient who has completed training requirements sufficient to satisfy the relevant American Board of Medical Specialties (ABMS)/American Osteopathic Association (AOA) boards for certification in Otolaryngology, Neurology, or Otology/Neurotology. For the diagnostic tests in this LCD, the audiologist or physician must have training and expertise as defined below:

The technical component of vestibular function tests (92540-92546) may be performed by an audiology assistant under the direct supervision of a qualified audiologist or physician with a specialty directly related to vestibular disorders.

Training and Expertise

CMS Online Manual System, Pub. 100-08, Program Integrity Manual, Chapter 13, Section 5.1 outlines that “reasonable and necessary” services are "ordered and/or furnished by qualified personnel." A qualified physician for this service/procedure is defined as follows: A) Physician is properly enrolled in Medicare. B) Training and expertise must have been acquired within the framework of an accredited residency and/or fellowship program in the applicable specialty/subspecialty in the United States or must reflect equivalent education, training, and expertise endorsed by an academic institution in the United States and/or by the applicable specialty/subspecialty society in the United States.

Diagnostic procedure 92540 through 92547 will be considered medically reasonable and necessary only if performed by appropriately trained providers. This training and expertise must have been acquired within the framework of an accredited residency and/or fellowship program in Otolaryngology, Neurology or Otology/Neurology or must reflect extensive continued medical education activities.

Section 1861[II](3) of the Act, provides that a qualified audiologist is an individual with a master’s or doctoral degree in audiology. Therefore a Doctor of Audiology (AuD) 4th year student with a provisional license from a state does not qualify unless he or she also holds a Master’s or doctoral degree in audiology. In addition, a qualified audiologist is an individual who:

- Is licensed as an audiologist by the State in which the individual furnishes such services; or
- In the case of an individual who furnishes services in a State which does not license audiologist has:
  - Successfully completed 350 clock hours of supervised clinical practicum (or is in the process of accumulating such supervised clinical experience), and
  - Performed not less than nine months of supervised full-time audiology services after obtaining a master’s or doctoral degree in audiology or a related field, and
  - Successfully completed a national examination in audiology approved by the Secretary.

For Audiologist in the State of Florida, the requirements for licensure in the areas of education, supervised clinical requirements and professional experience requirements can be found in Florida Statutes, Chapter 468, Part I, ss 468.1105-468.1315. The Florida Statutes are updated annually after the conclusion of a regulator legislative session, typically published in July/August. For this LCD, an audiologist must meet all the requirements outlined in the Statutes.

Limitations:

- If a beneficiary undergoes diagnostic tests performed by an audiologist without a physician referral, the tests are not covered, even if the audiologist discovers a pathological condition.
- Diagnostic tests ordered before a physician performs a complete history, physical and medication review to rule out non-vestibular causes of balance problems, will not be seen as medically reasonable and necessary.
- When diagnostic information required to determine the appropriate medical or surgical treatment is already known to the physician, or the diagnostic services are performed only to determine the need for or the appropriate type of hearing aid, these services are not covered.
- Audiological services billed as incident to the service of a physician or NPP or as services incident to an audiologist’s services are not covered.
- When a qualified physician or NPP orders a specific audiological test using the CPT descriptor for the test, only that test may be provided on that order. Further orders are necessary if the ordered test indicates that other tests are necessary to evaluate, for example, the type or cause of the condition. However, when the
qualified physician or NPP orders diagnostic audiological tests by an audiologist without naming specific tests, the audiologist may select the appropriate battery of tests.

Under any Medicare payment system, payment for audiological diagnostic tests is not allowed by virtue of their exclusion from coverage in section 1862(a)(7) of the Social Security Act when:

- The type and severity of the current hearing, tinnitus or balance status needed to determine the appropriate medical or surgical treatment is known to the physician before the test; or
- The test was ordered for the specific purpose of fitting or modifying a hearing aid.

Coding Information

Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

999x  Not Applicable

Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory. Unless specified in the policy, services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

99999  Not Applicable

CPT/HCPCS Codes

Group 1 Paragraph: N/A

Group 1 Codes:

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<th>Description</th>
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<td>92537</td>
<td>CALORIC VESTIBULAR TEST WITH RECORDING, BILATERAL; BITHERMAL (IE, ONE WARM AND ONE COOL IRRIGATION IN EACH EAR FOR A TOTAL OF FOUR IRRIGATIONS)</td>
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<td>92538</td>
<td>CALORIC VESTIBULAR TEST WITH RECORDING, BILATERAL; MONOTHERMAL (IE, ONE IRRIGATION IN EACH EAR FOR A TOTAL OF TWO IRRIGATIONS)</td>
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<td>92540</td>
<td>BASIC VESTIBULAR EVALUATION, INCLUDES SPONTANEOUS NYSTAGMUS TEST WITH ECCENTRIC GAZE FIXATION NYSTAGMUS, WITH RECORDING, POSITIONAL NYSTAGMUS TEST, MINIMUM OF 4 POSITIONS, WITH RECORDING, OPTOKINETIC NYSTAGMUS TEST, BIDIRECTIONAL FOVEAL AND PERIPHERAL STIMULATION, WITH RECORDING, AND OSCILLATING TRACKING TEST, WITH RECORDING</td>
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<td>92541</td>
<td>SPONTANEOUS NYSTAGMUS TEST, INCLUDING GAZE AND FIXATION NYSTAGMUS, WITH RECORDING</td>
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<td>92542</td>
<td>POSITIONAL NYSTAGMUS TEST, MINIMUM OF 4 POSITIONS, WITH RECORDING</td>
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<td>92544</td>
<td>OPTOKINETIC NYSTAGMUS TEST, BIDIRECTIONAL, FOVEAL OR PERIPHERAL STIMULATION, WITH RECORDING</td>
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<td>92545</td>
<td>OSCILLATING TRACKING TEST, WITH RECORDING</td>
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<td>92546</td>
<td>SINUSOIDAL VERTICAL AXIS ROTATIONAL TESTING</td>
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<td>92547</td>
<td>USE OF VERTICAL ELECTRODES (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)</td>
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ICD-10 Codes that Support Medical Necessity

Group 1 Paragraph: N/A
Group 1 Codes:

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<td>H81.10 - H83.2X9</td>
<td>Benign paroxysmal vertigo, unspecified ear - Labyrinthine dysfunction, unspecified ear</td>
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<td>H83.90 - H83.93</td>
<td>Unspecified disease of inner ear, unspecified ear - Unspecified disease of inner ear, bilateral</td>
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<td>R42</td>
<td>Dizziness and giddiness</td>
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**ICD-10 Codes that DO NOT Support Medical Necessity**

**Additional ICD-10 Information**

N/A

**General Information**

**Associated Information**

**Documentation Requirements**

The medical record must clearly indicate the medical necessity of the services being billed. In addition, documentation that the service was actually performed must be included in the patient’s medical record.

The services covered in this LCD require a recording be obtained at the time the service is rendered. These recordings must be maintained in the patient’s medical record and be made available upon request. The procedure report by itself is not enough to show that the services being billed are medically reasonable and necessary. Documentation of the medical necessity of the service is typically found in the office note when the service is performed in an office setting or the physicians progress note(s) when the service is performed in a facility setting.

The medical record must contain a detailed history and physical exam including a complete medication review. The medical record must support that other physiological/psychological, medication or other systemic reasons that could cause the balance problems were ruled out and that it is medically necessary to proceed with diagnostic testing of the vestibular system. The medical record must also contain the name and serial number of the equipment used to perform the vestibular tests.

The physician ordering the vestibular test covered in this LCD must appear on the audiologist claim.

All documentation requirements outlined above must be made available upon request for review.

**Utilization Guidelines**

It is rare that a specific symptom occurs in only one disease and that the diagnosis can be established based on the presence of this symptom only - a term called pathognomic. As many conditions have "overlapping" symptoms and findings, a methodical and thorough scientific approach must be used to narrow down the possibilities. The selection of diagnostic procedures is not random. It usually follows accepted clinical paradigms.

The first step in any diagnostic evaluation is the history and physical examination. From here on, the provider develops a testing strategy depending on an individual patient's situation, her or his progression in the course of an illness, and the probability of an abnormal result for a given diagnostic test. Other considerations include the predictive values, invasiveness, and risks of certain testing modalities. This is not an all-inclusive list, and all aspects and pros and cons must be placed into perspective against the background of an individual patient's situation. For example, patients who have been previously diagnosed with coronary artery disease and who are stable, generally do not need cardiac catheterization. However, once they develop unstable angina, they are subjected to coronary arteriography. Similarly, not all patients with headaches require a CT scan, but they do if there is reason to suspect an intracranial neoplasm or life-threatening vascular pathology.

It is not appropriate to merely match a diagnostic test (CPT code) with a condition or diagnostic code for which it could be performed at some point and time during an episode of an illness. There must be a compelling patient care reason, and a constellation of factors that require the carrying out of this test must exist at the time when the testing is ordered and performed. Furthermore, the treating provider must be able to use the test results in
the patient’s care. This rationale for ordering and performing a diagnostic test at a certain point in a patient’s evaluation and treatment must be documented in the medical record.

This prudent evaluative approach is not only a regulatory requirement (Code of Federal Regulations (CFR), Title 42, part 410.32). It is primarily the standard of accepted medical practice, as anchored in medical teaching and reputable peer reviewed medical literature. Diagnostic testing that is not in keeping with these principles is not reimbursable.

It is expected that these services would be performed as indicated by current peer reviewed medical literature and/or standards of practice. When services are performed in excess of established parameters, they are subject to medical review for medical necessity.

It is generally not medically necessary to repeat the entire battery of vestibular function tests. In the instance where testing is performed to assess the efficacy of medical or surgical intervention, testing should be limited to those tests medically necessary to determine the success of treatment and guide further therapy. If the complete battery of tests are repeated, the medical record must clearly reflect the medical necessity of such an approach. When symptoms have resolved and then recurred absent any medical or surgical intervention, a repeat of the entire battery of tests must be substantiated by clear documentation in the medical record as to why extensive repeat testing is medically necessary.

For procedure code 92537: Goggles are placed over the patient’s eyes and adjusted firmly on the patient’s face. Video cameras are positioned so that the pupils are in the field of the camera, and contrast and sensitivity are adjusted so that the pupil can be differentiated and tracked during testing. Caloric vestibular test is performed by irrigating the ear canal with either water or air for a period of 30 to 60 seconds and recording the movement response (nystagmus) for approximately two minutes following the irrigation. Sufficient time is given (Typically 5 minutes) before the opposite ear is irrigated. Based on standard practice, procedure code 92537 is intended to report a complete caloric vestibular testing procedure that includes bilateral performance of bithermal irrigation (ie, one warm and one cool irrigation for each each). Fewer irrigation procedures require a different method of reporting according to what was done. Three irrigations (ie, irrigation of both ears using monothermal irrigation of one ear and bithermal irrigation of the contralateral ear), code 92537 is reported with modifier 52 appended.

For procedure code 92538: Monothermal irrigation (ie; irrigation of both ears with either cool or warm irrigation) is reported once with procedure code 92538. If a single ear is irrigated with a single method of irrigation (cool or warm), procedure code 92538 is reported once with modifier 52 appended.

It is not expected to see 92540, 92541, 92542 or 92544, 92545 or 92546 billed more than once during a session.

**Sources of Information and Basis for Decision**

FCSO reference LCD number – L29407


American Medical Association, CPT Assistant, September 2006, Volume 16 issue 9; page13


Florida Statutes 2013. Available at www.leg.state.fl.us/statutes


### Revision History Information

<table>
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<th>Revision History Date</th>
<th>Revision History Number</th>
<th>Revision History Explanation</th>
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<td>01/01/2016</td>
<td>R2</td>
<td>Revision Number: 1 Publication: December 2015 Connection LCR B2016-004</td>
<td>• Revisions Due To CPT/HCPCS Code Changes</td>
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<td>Explanation of Revision: Annual 2016 HCPCS Update. CPT code 92543 was deleted and replaced with CPT codes 92537 and 92538. The effective date of this revision is based on date of service</td>
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<td>10/01/2015</td>
<td>R1</td>
<td>ICD-10 LCD UPDATED.</td>
<td>• Other</td>
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### Associated Documents

**Attachments**

N/A

**Related Local Coverage Documents**

Article(s)

A54818 - Vestibular Function Testing - coding guidelines

**Related National Coverage Documents**

N/A

**Public Version(s)**

Updated on 12/29/2015 with effective dates 01/01/2016 - N/A

Some older versions have been archived. Please visit the MCD Archive Site to retrieve them

### Keywords