Medical Policy

Blue Cross Blue Shield Blue Care Network of Michigan

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Joint Medical Policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and is therefore subject to change.

***Current Policy Effective Date: 3/1/13**
(See policy history boxes for previous effective dates)

Title: Automated Audiometry (e.g., Otogram™)

Description / Background

Hearing loss affects more than 28 million people in the United States and is more common among older adults than children. It is estimated that 40 percent of persons over 65 years of age have significant hearing loss. Hearing loss may result from genetic factors; infection; head trauma; mechanical problems in the external ear canal or middle ear; damage to sensory structures of the inner ear, auditory nerve or auditory nerve pathways in the brain or exposure to noise.

Concerns regarding hearing loss may be identified by a primary care physician, or other trained health care professionals, in response to findings in a physical examination or to questions posed to determine hearing issues. If potential hearing loss is identified, a referral is made for an audiologic evaluation, which is performed by, or under the supervision of, a qualified audiologist. The purpose of the evaluation is to determine the degree, type and configuration of the hearing loss. The audiologic evaluation includes a case history; physical examination of the ear structures; pure-tone audiometry, which tests for responses to tones at varying frequencies and intensities; and speech audiometry, which includes speech reception threshold and word recognition. Additional testing may include auditory evoked potentials, otoacoustic emissions (OAE) and acoustic immittance measures, which include tympanometry, acoustic reflex and static acoustic impedance.

The Otogram™ is an automated, self-administered hearing test device. A patient receives brief instructions before beginning the testing process. The Otogram is touted to perform the following diagnostic hearing tests: pure-tone air and bone conduction, speech reception threshold, speech discrimination, tympanometry, acoustic reflex and OAE.

Regulatory Status:

The Otogram™ received FDA approval in September 2004.

Medical Policy Statement

Automated audiometry such as an Otogram™ hearing test, is not equivalent to a manual, comprehensive evaluation performed by a qualified audiologist. The effectiveness and clinical utility of automated audiometry have not been established; therefore, it is considered experimental/ investigational.

Inclusionary and Exclusionary Guidelines (Clinically based guidelines that may support individual consideration and pre-authorization decisions)

N/A

CPT / HCPCS Level II Codes *(Note: The inclusion of a code in this list is not a guarantee of coverage. Please refer to the medical policy statement to determine the status of a given procedure)*

Established codes:

N/A

Other codes (investigational, not medically necessary, etc.):

0208T 0209T 0210T 0211T 0212T

Rationale

To date, there are only two published studies comparing automated audiometry to manual audiometry performed by an audiologist.

In 2009, Ho et al. published a small prospective nonrandomized validation study comparing computer-assisted audiometry using the Otogram versus inter-rater and intrarater accuracy and reliability for audiologists. Forty-eight patients referred to an otology outpatient clinic had two pure tone audiograms. The level of agreement in air-conduction and bone-conduction thresholds between the audiologist and the Otogram on the same patient was equivalent to the inter-rater level of agreement between pairs of audiologists. Approximately 94 percent of air-conduction thresholds and 91 percent of bone-conduction thresholds measured by the Otogram fell within 10 dB of thresholds measured by an audiologist. Intrarater comparisons between audiologists were very good for air-conduction and bone-conduction. The intrarater level of agreement between repeated Otogram thresholds was just as good for air-conduction and bone-conduction thresholds. The researchers concluded that “the Otogram is just as reliable as audiologists at determining hearing thresholds. We recommend that the Otogram can be safely used in a controlled clinical setting supervised by audiologists.”

The researchers noted that further studies are required to determine the most appropriate patient population for computer-assisted audiometry.

Yu et al., 2011 reported on a small study assessing the validity of the Otogram on patients with bilateral mixed, bilateral conductive, and unilateral conductive hearing loss, which are deemed "difficult-to-test". In this study, 28 difficult to test individuals were given three audiograms, two were performed by an audiologist and the third by the Otogram. The audiograms conducted by the audiologist were compared to establish test-retest reliability. The Otogram was then compared with the testing performed by the audiologists. The authors reported that the audiograms performed by the audiologists had high levels of agreement with over 90 percent of air and bone conduction thresholds within 10dB of each other. In the Otogram versus audiologist comparison, only air conduction conditions had high levels of agreement with the percentage of thresholds within 10 dB. Bone conduction conditions did not yield the same high levels of agreement as did the air conduction conditions. The authors concluded that additional research is needed to determine the reason for these differences and ways to control for them.

The American Speech-Language-Hearing Association position is that hearing screening should be performed by audiologists holding a Certificate of Clinical Competence (CCC-A) from the American Speech-Language-Hearing Association (ASHA) and state licensure where applicable, speech-language pathologists holding a Certificate of Clinical Competence (CCC-SLP) from the ASHA and state licensure where applicable and other personnel under the supervision of an ASHA-certified audiologist.

Government Regulations

National/Local:

There is no national or local coverage determination specifically addressing automated audiometry.

Michigan Department of Community Health:

MDCH does not have a policy on automated audiometry. There are fees listed in the MDCH - Practitioner and Medical Clinic Database for procedure codes 0208T-0212T.

(The above Medicare information is current as of the review date for this policy. However, the coverage issues and policies maintained by the Centers for Medicare & Medicare Services [CMS, formerly HCFA] are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. For the most current information, the reader should contact an official Medicare source.)

Related Policies

N/A

References

1. American Medical Association, *CPT® Assistant*, "Manual and Automated Audiometry," March 2011.
2. American Speech-Language-Hearing Association, "Hearing Screening and Testing," < http://www.asha.org/public/hearing/Hearing-Testing/ > (October 15, 2012).
3. Centers for Medicare and Medicaid Services (CMS), *Medicare Benefit Policy Manual,* "Chapter 15 – Covered Medical and Other Health Services," Section 80.3 Audiological Diagnostic Testing, Rev. 132, Issued: 09-03-10, Effective: 09-30-10, Implementation: 09-30-10. http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c15.pdf (October 15, 2012).
4. Centers for Disease Control and Prevention (CDC), "Hearing Loss," < http://www.cdc.gov/ncbddd/hearingloss/index.html >, (October 15, 2012).
5. United States Food and Drug Administration (FDA), *510(k) Summary,* Otogram CA3350, March 2007. http://www.accessdata.fda.gov/cdrh_docs/pdf7/K070118.pdf (October 22, 2012).
6. Ho, Allan Thiam Poh, Anthony J. Hildreth and Leon *Lindsey, "Comput*er-Assisted Audiometry Versus Manual Audiometry," *Otology* & *Neurotology,* Vol. 10, No.7, 2009, pp. 876-883.
7. Yu, J. et al., "Automated Hearing Te*sts: Ap*ply*ing the Otog*ram to Patients who are Difficult to Test," *Journal of Otolaryngology-Head & Neck Surgery*, Volume 40, issue 5, 2011, pp. 376-383.

The articles reviewed in this research include those obtained in an Internet based literature search for relevant medical references through October 22, 2012, the date the research was completed.

Joint BCBSM/BCN Medical Policy History

Policy Effective Date	BCBSM Signature Date	BCN Signature Date	Comments
5/1/10	3/16/10	2/16/10	Joint policy established
1/1/12	10/11/11	11/9/11	Routine maintenance
3/1/13	12/11/12	12/31/12	Routine maintenance; updated references and Medicare information. Title changed from "Computer Assisted Audiometry" to "Automated Audiometry".

Next Review Date: 4th Qtr, 2013

Pre-Consolidation Medical Policy History

Original Policy Date	Comments
BCN: N/A	Revised: N/A
BCBSM: N/A	Revised: N/A

BLUE CARE NETWORK BENEFIT COVERAGE
POLICY: AUTOMATED AUDIOMETRY (E.G., OTOGRAM™)

I. Coverage Determination:

Commercial HMO (includes Self-Funded groups unless otherwise specified)	Not covered
BCNA (Medicare Advantage)	Not covered
BCN65 (Medicare Complementary)	Coinsurance covered if primary Medicare covers the service.
Blue Cross Complete of Michigan	Covered

II. Administrative Guidelines:

- The member's contract must be active at the time the service is rendered.
- The service must be authorized by the member's PCP except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Services must be performed by a BCN-contracted provider, if available, except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Payment is based on BCN payment rules, individual certificate and certificate riders.
- Appropriate copayments will apply. Refer to certificate and applicable riders for detailed information.
- CPT - HCPCS codes are used for descriptive purposes only and are not a guarantee of coverage.