

Evidence Based Guideline

Evoked Otoacoustic Emissions

File Name: evoked_otoacoustic_emissions
Guideline Number: EBG.MED1140
Origination: 7/1995
Last Review: 6/2008
Next Review: 6/2010

Description of Procedure or Service

Otoacoustic emissions (OAE) are low-intensity sounds that are produced by activity in a normal [cochlea](#). These "ear sounds" can be measured with a sensitive microphone placed in the ear canal. The sound is initiated by brief stimuli, usually clicks, but can be tone bursts. The microphone picks up echoes from the clicking if the [cochlea](#) is working normally. OAE is used in the screening as well as the diagnosis of hearing impairment in neonates and young children.

Evidence Based Guideline for Evoked Otoacoustic Emissions

Evoked otoacoustic emissions may be appropriate in the following situations:

- When utilized as diagnostic screening for hearing in infants.
- When utilized as a diagnostic screening for hearing for young children who are unable to respond reliably to standard hearing testing.
- For use as a diagnostic evaluation of the following patients:
 - Potentially [malingering](#) patients
 - Patients with significant [cognitive](#) impairment (e.g. Alzheimer's)
 - Patients with profound [tinnitus](#) where no other cause is found
- For monitoring cochlear damage when [ototoxic](#) drugs are administered (i.e., during chemotherapy with [ototoxic](#) agents).

Medical Evidence regarding Evoked Otoacoustic Emissions indicates it is not recommended in the following situations:

For adults other than those listed above.

Benefits Application

Please refer to certificate for availability of benefit. This guideline relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore certificate language should be reviewed before applying the terms of the policy.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: 92587, 92588

Medical Term Definitions

Cochlea

a spirally wound, tube-like structure that forms part of the inner ear and is essential for hearing. This hearing organ makes up the inner ear. Looking like the round shell of a snail, it is composed of a network of liquid filled tubing that also houses the tiniest of hairs. When sound is sent here by the ossicles it causes ripples in the liquid and the hairs to bend. This movement triggers electrical impulses which are transmitted to the auditory nerve.

Cognitive

pertains to cognition, which is the mental process that involves thought or perception. It includes all aspects of perceiving, thinking, and remembering.

Malingering

simulation of symptoms or exaggeration of symptoms of illness or injury with intent to deceive in order to obtain a goal, e.g., a claim of physical illness to avoid jury duty.

Ototoxic

causing damage to the nerves or organs involved in hearing and balance.

Tinnitus

a noise in the ears, as ringing, buzzing, roaring, clicking, etc.

Scientific Background and Reference Sources

6/95 - Consultant Review

7/95 - Vice President, Medical Affairs

11/97 - BCBSA Medical Policy Reference Manual

3/99 - Specialty Consultant Review

12/99 - Medical Policy Advisory Group

Specialty Matched Consultant Advisory Panel - 7/2000

Medical Policy Advisory Group - 9/14/2000

Specialty Matched Consultant Advisory Panel - 6/2002

BCBSA Medical Policy Reference Manual, 9.01.02; 04/29/03

Specialty Matched Consultant Advisory Panel - 6/2004

BCBSA Medical Policy Reference Manual, 9.01.02; 08/17/05

Policy: Evoked Otoacoustic Emissions

Specialty Matched Consultant Advisory Panel - 6/1/2006

Specialty Matched Consultant Advisory Panel - 6/23/08

Policy Implementation/Update Information

- 7/95 Original policy issued
- 9/96 Reaffirmed
- 3/99 Revised per Specialty Consultant Review to include exceptions for adults may include malingering patients, retarded patients, or patients with profound tinnitus where no other cause is found. Per Medical Director, add this recommendation to the Description section of the policy.
- 7/99 Reformatted, Medical Term Definitions added.
- 12/99 Reaffirmed, Medical Policy Advisory Group
- 7/00 Specialty Matched Consultant Advisory Panel. Removed phrasing stating that Evoked Otoacoustic Emissions are an integral part of an exam or office visit. Added criteria for young children stating Evoked Otoacoustic Emissions are covered for young children who are unable to respond reliably to standard hearing testing.
- 8/00 System coding changes.
- 9/00 Medical Policy Advisory Group review. Approved. No changes in criteria.
- 6/02 Specialty Consultant Advisory Panel review. Under "When Evoked Otoacoustic Emissions is Covered" revised "Retarded patients" to state "Patients with significant cognitive impairment (e.g. Alzheimer's)". Description section revised for clarity.
- 4/04 Benefit Application and Billing/Coding sections updated for consistency.
- 8/26/04 Specialty Matched Consultant Advisory Panel review. Under "When Covered" section, added bullet: "For monitoring cochlear damage when ototoxic drugs are administered (i.e., during chemotherapy with ototoxic agents)." Notification given 8/26/04. Effective 10/28/04.
- 7/10/06 Medical term definitions and reference sources added. Specialty Matched Consultant Advisory Panel review 6/1/06. No changes to criteria.
- 8/28/06 Medical Policy changed to Evidence Based Guideline.
- 7/28/08 Specialty Matched Consultant Advisory Panel review 6/23/08. Reference source added. No changes to guidelines.

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.