POLICY STATEMENT:

Based upon our criteria and assessment of peer-reviewed literature, all proposed treatment modalities for the treatment of idiopathic tinnitus have not been medically proven to be effective and are considered investigational.

Refer to Corporate Medical Policy #2.01.09 regarding Biofeedback.

Refer to Corporate Medical Policy #3.01.09 regarding Transcranial Magnetic Stimulation.

Refer to Corporate Medical Policy #7.01.26 regarding Cochlear Implants and Auditory Brainstem Implants.

Refer to Corporate Medical Policy #8.01.19 regarding Cognitive Rehabilitation.

Refer to Corporate Medical Policy #11.01.03 regarding Experimental and Investigational Services.

POLICY GUIDELINES:

I. For patients with tinnitus and hearing loss, in which hearing aids are prescribed to treat the hearing loss, benefits will be provided according to the member’s subscriber contract for hearing aids.

II. The Federal Employee Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

DESCRIPTION:

Tinnitus is the term for “noises” heard in the ears or in the head (e.g., buzzing, ringing, whistling, hissing, or pulsing) that do not come from an external source. Emergence of tinnitus, usually lasting for a short period of time, is extremely common. Tinnitus is a natural phenomenon that usually resolves after a short period of time. Persistent tinnitus occurs in about 10% of the population and is due to parts of the brain concerned with analyzing sound signals focusing on weak messages which, in most cases, are part of normal ear function. Persistent tinnitus is often triggered or made worse by emotional events, bereavement, work and family stress, an accident or an injury.

Tinnitus can be divided into two major categories: that generated by para-auditory structures, usually from the vascular or myoclonic sources, and that generated by the sensorineural auditory system. Distinction between the two categories is important as evaluation and treatment of the two forms is entirely different.

Tinnitus is classified into two types:

I. Subjective tinnitus - is more common and is audible only to the patient. It may arise from electrophysiological disturbances anywhere in the auditory system. The underlying causes of subjective tinnitus include:
   A. otological disorders (e.g., presbycusis, noise-induced, Meniere's disease, chronic otitis media),
   B. metabolic disorders (e.g., diabetes, thyroid diseases, hyperlipidemia, zinc or vitamin deficiency),
   C. pharmacological disorders (e.g., non-steroidal anti-inflammatory drugs, caffeine, nicotine, antidepressants),
   D. neurological disorders (e.g., head trauma, whiplash, multiple sclerosis, vestibular schwannoma),
   E. psychological disorders (depression, anxiety), and
F. infectious and neoplastic disorders (syphilis, acoustic neuroma, autoimmune diseases, acquired immune deficiency syndrome).

II. Objective tinnitus - refers to noises that can be heard by an examiner when a stethoscope is placed against the patient's external auditory canal. Objective tinnitus usually has a vascular or mechanical origin.

The treatment of tinnitus often depends on the severity of the patient’s condition. Treatment for tinnitus is supportive, as there is no cure. Several methods of treatment have been proposed. These treatments include, but are not limited to:

I. acoustic neural stimulus (e.g., Neuromonics Tinnitus Treatment),
II. alternative therapies (e.g., acupuncture, herbal preparations such as Ginkgo biloba, hypnosis),
III. biofeedback,
IV. cognitive behavioral therapy,
V. drug therapy (e.g., misoprostol, botulinum toxin A),
VI. electromagnetic energy,
VII. hearing aids and cochlear implants,
VIII. hyperbaric oxygen therapy,
IX. masking with a tinnitus masker device,
X. sound therapy,
XI. tinnitus coping therapy,
XII. tinnitus retraining therapy (TRT),
XIII. transcranial magnetic stimulation,
XIV. transcutaneous electric nerve stimulation (TENS), and
XV. transmeatal laser irradiation.

Masking, with the use of a masker device, is used to “cover-up” the tinnitus perception with a competitive signal that either partially or completely competes with or conceals the tinnitus. This can be achieved by a number of methods, ranging from environmental masking to ear-level worn sound generators. There are commercially available recordings of a wide range of sounds that can provide complete or partial masking.

Tinnitus Retraining Therapy, also known as Habituation Therapy or the Jastreboff Method, is a neurophysiological approach to treating patients with tinnitus. TRT depends upon the natural ability of the brain to “habituate” a signal, to filter it out on a subconscious level so that it does not reach conscious perception. TRT is a treatment approach aimed at reducing the individual’s reaction to tinnitus or training them to ignore it through sound therapy and directive counseling.

I. Sound therapy involves the patient being fitted with a device called a sound generator (white noise); which is designed not to mask or cover the sound of the tinnitus, but serves to reduce the contrast between the patient’s tinnitus and the acoustic environment in an effort to retrain the patient’s response to tinnitus.

II. Directive counseling is used to gradually remove the meaning from the tinnitus signal allowing it to become a neutral stimulus.

RATIONALE:

Several studies have been published addressing the various proposed modalities for the treatment of tinnitus; although none of the studies allow for scientific conclusions regarding the efficacy of the modalities. Most studies are small and exhibit several limitations. Although the studies recently published addressing tinnitus are generally randomized, controlled studies the majority included a small sample size and concluded the various methods of treatment studied did not prove to be effective in the treatment of tinnitus. Clinical research in the form of appropriate study design, adequate sample size, careful choice of outcome measures and long term follow-up is lacking to support the efficacy of tinnitus treatments.
Masking - While several large case series have reported positive results of tinnitus maskers, placebo-controlled trials are required to evaluate the extent of the expected placebo effect. No recent randomized, placebo-controlled trials were identified in a literature search.

Tinnitus retraining therapy - While Jastreboff has published the theoretical rationale behind tinnitus-retraining therapy, no controlled trials were identified in a search of the literature. Other articles were identified, but these studies were either focused on tools to evaluate the results of tinnitus retraining or consisted of uncontrolled trials. The lack of controlled studies does not permit scientific conclusions.

Transcranial Magnetic Stimulation – Poreisz, et al. (2009) studied the effect of theta-burst stimulation (TBS), a novel repetitive transcranial magnetic stimulation (rTMS) paradigm, in twenty chronic tinnitus patients. Tinnitus severity and loudness were monitored using a tinnitus questionnaire (TQ) and a visual analogue scale (VAS) before each session. Patients received 600 pulses of continuous TBS (cTBS), intermittent TBS (iTBS) and intermediate TBS (imTBS) over the left inferior temporal cortex with an intensity of 80% of the individual active or resting motor threshold. Changes in subjective tinnitus perception were measured with a numerical rating scale. Although half the patients reported a slight attenuation of tinnitus perception, group analysis resulted in no significant difference when comparing the three types of TBS. Only cTBS resulted in a significant short-lasting improvement of the symptoms. In addition there was no significant difference when comparing the responder and non-responder groups regarding their anamnestic and audiological data. The TQ score correlated significantly with the VAS, lower loudness indicating less tinnitus distress. The authors concluded TBS does not offer a promising outcome for patients with tinnitus in this study.

**CODES:**

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<thead>
<tr>
<th>Number</th>
<th>Description</th>
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<tr>
<td>92625</td>
<td>Assessment of tinnitus (includes pitch, loudness, matching and masking)</td>
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The following codes are investigational (E/I) for the ICD9 and ICD10 diagnoses listed below:

- 92626 Evaluation of auditory rehabilitation status; first hour
- 92627 each additional 15 minutes
- 92630 Auditory rehabilitation; prelingual hearing loss
- 92633 postlingual hearing loss

**HCPCS:**

No code(s)

**ICD9:**

- 388.3 Tinnitus
- 388.30 Tinnitus, unspecified
- 388.31 Subjective tinnitus
- 388.32 Objective tinnitus

**ICD10:**

- H93.11-H93.19 Tinnitus (code range)
REFERENCES:


*key article

**KEY WORDS:**

Habituation therapy, Jastreboff method, Masking, Tinnitus retraining therapy.

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**CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS**

There is currently a National Coverage Determination (NCD) for Tinnitus Masking. Please refer to the following websites for Medicare Members: [http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=85&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York+-+Upstate&KeyWord=tinnitus&KeyWordLookUp=Title&KeyWordSearchType=And&bc=gAAAAACAAAAA&.](http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=85&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York+-+Upstate&KeyWord=tinnitus&KeyWordLookUp=Title&KeyWordSearchType=And&bc=gAAAAACAAAAA&).