




Embracing the Tinnitus Patient:



Making Treatment and Reimbursement a Practical Reality

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Our Goals for Today...

What do tinnitus patients need from us?

How can Neuromonics help me to take care of my patients?

How can I get reimbursed for my tinnitus services?






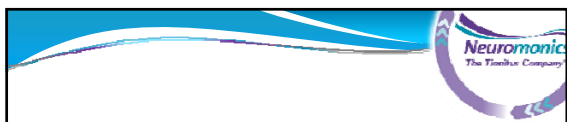
Our Goals for Today...

Arm you with the information to make confident, practical treatment recommendations.


Give your patients **hope**.


Empower your patients to overcome their individual tinnitus challenges.






What do tinnitus patients need from us?

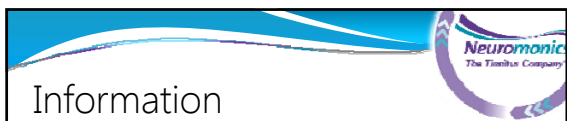




Patient experience...


- **Fear**
 - Where did this sound come from?
- **Anxiety**
 - Is there something more serious wrong?
- **Hopelessness**
 - It's never going to get any better.
- **Anger**
 - Why did this happen to me?
- **Loss of control**
 - Nothing I do makes it any better!





Information

- Where does tinnitus come from?
 - Overview of tinnitus neurophysiology
- Prevalence, commonality
- Remove the mystery
 - Undermine the fear and anxiety
- We are going to figure this out together!



Tinnitus Neurophysiology

Auditory
• Disruption to auditory pathway
• Brain works to compensate

Awareness
• Brain incorrectly labels tinnitus signal as harmful/threatening
• Brain seeks tinnitus in order to warn the body

Stress Response
• ANS arousal
• Fight or flight
• Sleep & concentration disturbance
• Lack of control
• Fear and anxiety

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Relief

Listen

- Tinnitus Questionnaires / Inventories
 - Tinnitus Reaction Questionnaire (TRQ)
 - Tinnitus Handicap Inventory (THI)
 - Tinnitus Functional Index (TFI)
 - Beck's Depression and Anxiety Scale
- Open Ended Questions
 - Utilize your interview skills
 - Provide handout prior to appointment

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Listen

- "If you didn't have your tinnitus, how would life be different?"
- "How does your tinnitus effect you? How often?"
- "How does your tinnitus effect your family?"
- "Do you feel your tinnitus interferes with your ability to understand conversation?"
- "Are there any places / activities that you avoid because the situation is too loud?"
- "What are your goals for tinnitus treatment?"

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Focused Treatment Plan
What do I / we need to do for me to get better?

- Roadmap for Success
- Lifestyle changes
 - Stress
 - Sleep habits
- Referrals
 - Psychologist
 - ENT
 - Dentist



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Focused Treatment Plan

- Tinnitus Treatment Objectives
 - A.
 - B.
- Steps to achieve treatment objective A.
 - 1.
 - 2.
 - 3.
- Steps to achieve treatment objective B.
 - 1.
 - 2.
 - 3.

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Focused Treatment Plan



What do I / we need to do for me to get better?

Product Implementation



- Why is it their best option?
 - Patient needs and characteristics
 - Individual tinnitus impact
 - Clinical evidence
- Build confidence in you as the expert
- They are coming to you for a solution
- Be clear in how you're going to help them!

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How can Neuromonics help me with my patients ?



Key Elements of Sound Therapy

- Reduce attention drawn to tinnitus
- Reduce loudness of the tinnitus
- Substitute a less disruptive noise for an unpleasant one
- Give the patient a sense of control (Coles, 1987;Vernon, 1977)

Music as the vehicle to accomplish these objectives



Goals of Sound Therapy

- Complete masking renders the tinnitus inaudible
 - Situational relief while listening
 - Patients with low tinnitus awareness/disturbance
 - **Sanctuary**
- Partial masking results in a perceptual change in tinnitus, as the tinnitus is reduced in prominence
 - Habituation
 - Patients with high awareness/disturbance
 - **Oasis**

How is the Neuromonics stimulus unique?

- Spectral Modification
- Shape signal based on the patient's audiogram
- Wide frequency stimulus
- Maximum stimulation of the auditory pathways
- Not only treat the reaction, but the tinnitus directly

Spectral Composition of Music + Hearing Thresholds of Typical Clinic Patient Sample

Impact of Customization

Mean MML (dB SPL)

Original: 74
Customized: 58*

Trial 3, 2 Stage group, n=19

- Tinnitus interaction at comfortable listening volume
- Directly facilitates sleep onset, relaxation, & concentration
- Speech intelligibility preserved

*t (16), = -10.412, p = < 0.01

Mechanism of Action

Auditory	Emotional	Attentional
1. Perception	2. Reaction	3. Awareness
Stimulation	Relaxation & Relief	Desensitization
<ul style="list-style-type: none"> •Wide-frequency acoustic stimulus for auditory deprivation •Customized for each patient's hearing profile (binaural, stereo) •Stimulates system evenly 	<ul style="list-style-type: none"> •Addresses Limbic and Autonomic systems •Pleasant, relaxing music •Relief from tinnitus perception 	<ul style="list-style-type: none"> •Intermittent tinnitus interaction •Graded increase in exposure, in relaxed state •Brain is "re-trained" to perceive <i>but ignore</i>



Oasis Product Details

- Two phase, formal treatment protocol
 - **Facilitate habituation**
- Individualized, ear specific stimulus
 - Account for asymmetries
- Data logging
- 4 Musical Programs
 - 60 BPM, resting heart rate
- Moderate to severe tinnitus patient






Sanctuary Product Details


- **Situational tinnitus relief**
- Single phase device
- 4 musical programs
- 3 fitting ranges
 - Semi customization
- Quick patient delivery model
- Entry level price point
- Low to moderate disturbance





Case Study #1

- TRQ: 20
- Awareness: 75%
- Disturbance: 50%
- Answers to Open Ended Assessment:
 - Trouble falling asleep, wakes up several times
 - Very tense at work, difficulty accomplishing goals
 - Avoids restaurants after 6:00pm
 - Tense at home, tinnitus is very distracting
- Audiogram: LE Normal / RE mild precipitous loss
- LDLs: <90 dBHL AU



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Assessment Results

- TRQ: 20
- Awareness: 75%
- Disturbance: 50%
- Answers to Open Ended Assessment:
 - Trouble falling asleep, wakes up several times
 - Very tense at work, difficulty accomplishing goals
 - Avoids restaurants after 6:00pm
 - Tense at home, tinnitus is very distracting
 - Wants a cure!
- Audiogram: LE Normal / RE mild precipitous loss
- LDL's: <90

Discussion

- Does the TRQ match up with open ended responses?
- Enough Q.O.L. factors to warrant formal treatment protocol?
 - Disturbance at Work / Home
- Decreased sound tolerance!!!
- Wants a cure –
 - Desire for habituation
 - Counsel regarding expectations
- Asymmetrical hearing

What product would you recommend for this patient?

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Oasis

- Why?
- Tinnitus impact beyond situational relief
- Condition the brain to lose the stress response
- Goal of habituation
 - Two phase protocol
- Datalogging
 - Guide usage
 - Optimize results
 - Address decreased sound tolerance (Hyperacusis Protocol)
- Programmed to address asymmetrical hearing


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Treatment Plan


- Tinnitus Treatment Objectives
 - A. Fall asleep quicker, more quality sleep
 - B. Relax when at home, be more pleasant
- Steps to achieve treatment objective A.
 - 1. Pair device with sleep routine, keep at bedside
 - 2. Condition brain to shut down for sleep with device
 - 3. Practice good sleep hygiene
 - 4. Use device if awakened to fall asleep quickly
- Steps to achieve treatment objective B.
 - 1. Use device first 15 mins after arriving home
 - 2. Set stage for relaxation, relaxation properties of music
 - 3. Use device while preparing dinner to help unwind
 - 4. Take a 15- 20 minute walk to aid in decompression


Relief



Case Study #2


- TRQ: 15
- Awareness: 20%
- Disturbance: 80%
- Answers to Open Ended Assessment:
 - Some difficulty falling asleep, few times a week
 - Hard to concentrate at work / tinnitus very distracting
 - Sometimes hard to relax
 - Would like relief from tinnitus
- Audiogram: Mild to moderate precipitous loss AU
- Wears hearing aids, still finds tinnitus bothersome
- LDL's: >90 dBHL AU






Sanctuary


- Why?
- Needs effective relief to disengage the limbic system
 - Ability to relax
 - Bedtime
 - Concentration at work (aux speaker option)
- Low tinnitus awareness (situational impact)
- Symmetrical hearing
- Normal sound tolerance





Treatment Plan

- Tinnitus Treatment Objectives
 - A. Relief when trying to fall asleep,
 - B. Concentrate at work
- Steps to achieve treatment objective A.
 - 1. Develop bedtime routine / pair device
 - 2. Condition brain to shut down for sleep
 - 3. No electronics 30 mins prior to sleep
 - 4. No caffeine after 2:00 pm
- Steps to achieve treatment objective B.
 - 1. Use device at work while at desk (headphones or speaker)
 - 2. Don't fight through tinnitus, use as soon as becomes bothersome
 - 3. Take breaks after long meetings to use device






Reimbursement



Tinnitus Assessment, Device and Treatment Services








Tinnitus Assessment

Appointment Guide: www.NeuromonicsProfessional.com

1. Tympanometry
2. OAE's
3. Comprehensive Audiometry
4. Assessment of Tinnitus
 1. Pitch Matching
 2. Loudness Match
 3. Minimum Masking Level
 4. Residual Inhibition
5. Loudness Discomfort Levels

How much should you charge for this appointment?





Code	Procedure	2013 Medicare Rate
92567	Tympanometry	\$14.30
92558	DPOAE's	\$ 18.72 – 21.78
92557	Comprehensive Audiometry	\$37.44
92625	Assessment of Tinnitus •Pitch Match •Loudness Match •MML	\$68.76
	Total	\$139.22
E1399	Durable Medical Equipment •Code used for device •Have to define treatment and why medically necessary	Amount inconsistent across insurance carriers Medicare NA

Submitting a claim: Device

Must include the following information:

- Letter of medical necessity
- Copy of all clinic/physician notes
- Summary of all the efforts/appointments the patient has made to get help for their tinnitus
- Description of the device you are submitting the claim for
- TRQ
- THQ
- Tinnitus Assessment results
- Audiogram
- Copy of Neuromonics Summary of Clinical Data



• Most common CPT code for the device is E1399 (DME)



Submitting a claim: Device

Durable Medical Equipment (E1399)

- Based on this definition, the Sanctuary should be considered DME.
- Historically, the Neuromonics Oasis has had limited insurance coverage under the DME provision; most likely due to the cost of the Oasis exceeding the typical DME coverage cap of \$2500 to \$3500 per calendar year.
- The Sanctuary falls well below this annual cap and may yield better insurance coverage for your patients.
- Additionally, the Sanctuary falls under the current 510k FDA Clearance as the Neuromonics Oasis thereby providing additional credibility to the claim



Submitting a claim: Treatment

- No CPT codes available for tinnitus treatment
- Doesn't mean we can't provide services because of insurance limitations
- Determine how much your time / training costs
- Bill patient for counseling and treatment plan building sessions
 - Address tinnitus goals
- Unbundled approach
 - Give guideline as to how many appointments you anticipate

