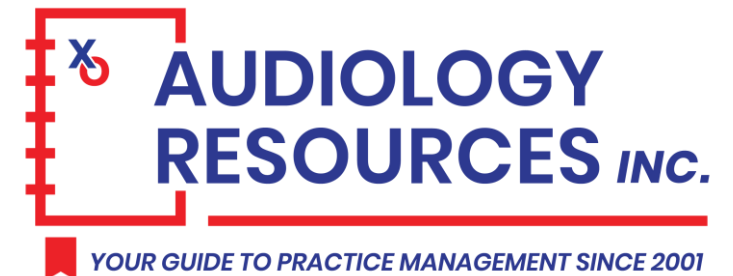


Audiology Opportunities: A Workshop on Practicing to the Top of our License

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Think Differently

"Here's to the crazy ones. The misfits. The rebels. The trouble-makers. The round pegs in the square holes. The ones who see things differently. They're not fond of rules, and they have no respect for the status-quo. You can quote them, disagree with them, glorify, or vilify them. But the only thing you can't do is ignore them. Because they change things. They push the human race forward. And while some may see them as the crazy ones, we see genius. Because the people who are crazy enough to think they can change the world, are the ones who do."



Responding to the Disruption

- Audiologists have to differentiate ourselves and our services from these disruptive forces that now exist in the marketplace.
 - How do we price the product and value the service?
 - How do we provide care and services not offered or available through these disruptive entities?
 - How do we embrace these patients who have procured their devices by “disruptive” means?
 - How do we expand our focus beyond a product?
 - This merely means you practice audiology.

The Value of Audiology

- Audiologists have value.
- When you no charge a patient, you:
 - You diminish your value and the value of the care your provide in the eyes of your patient.
 - You effectively cost your practice dollars because you did not collect payment yet you were paid a wage for that window of time.
- Patients EXPECT to pay you.
- **Insurance does not cover 100% of every item and service a patient may need or want.**
- Insurance covers what is minimally medically reasonable and necessary.
 - Do not cover deluxe.
 - Do not cover personal comfort items.

The Value of Audiology

- The provision of the research evidence based care that a consumer/patient cannot get over the counter or from big box retailers.
 - Consumers will not pay you to sell them something but will pay you to provide them care.
 - They will pay for medically necessary services.

Differentiation

- Products:
 - Expand the “products” we offer to our patients.
 - Practice to our fullest, state defined scope of practice.
 - Maybe it is time to kick it old-school and have a less product based practice and a more service based practice.
 - THIS is what differentiates audiologists from our competitors and the “disruptions.”
- Expertise and Services:
 - Increase medically necessary, research evidence based audiologic and vestibular services.
 - Raise the level and standard of care.
- Promotion:
 - Marketing strategies will need to change.
- Pricing:
 - Unbundling/Itemization.

Practicing to Top of License

- THIS is what differentiates you in the marketplace?
- What can you offer that consumers cannot get OTC?
 - Communication and functional needs assessments.
 - Patient education and training programs for non-traditional purchases.
 - Concierge care.
 - Telehealth.
 - Hearing protection.
 - Industrial audiology.
 - CI and BAHA candidacy and management.
 - Auditory rehabilitation.
 - Tinnitus evaluation and management.
 - Vestibular evaluation and rehabilitation.
 - Home hazards evaluations.
 - Auditory processing screening, evaluation, and treatment of adults and children.
 - Primarily cash services.
 - All are great sources of referral.
 - All can influence patient performance and satisfaction with amplification.

Value of Change

ONE REASON PEOPLE
RESIST CHANGE IS
BECAUSE THEY FOCUS
ON WHAT THEY HAVE TO
GIVE UP, INSTEAD OF
WHAT THEY HAVE TO
GAIN.

THEDAILYQUOTES.COM

“MOM”

- **Master**
- **Operationalize**
- **Monetize**
- **Market**

Communication and Functional Needs Assessment

Master

- <https://www.audiologypractices.org/putting-unbundled-pricing-into-action-in-a-medical-audiology-practice>
- https://starkeypro.com/pdfs/sas/Starkey_Audiology_Series_vli3.pdf
- https://journals.lww.com/thehearingjournal/Fulltext/2007/09000/Instead_of_a_hearing_aid_evaluation,_let_s_assess.5.aspx
- https://www.phonakpro.com/content/dam/phonakpro/gc_hq/en/events/2009/adult_conference_chicago/20_P69344_Pho_Kapitel_10_S113_118.pdf
- <https://www.semanticscholar.org/paper/L-Matching-Hearing-Technology-to-the-Needs-%2C-Goals-McCullough-Mormer/ad105acdc75a712358c451fa727ebf94ff37e8eb?p2df>
- https://www.hearingloss.org/wp-content/uploads/HLM_MA-2016_Compton-Conley.pdf?pdf=2016-hlm-ma-cconley
- <https://www.audiologyonline.com/audiology-ceus/course/communication-needs-assessment-35641>
- <https://www.audiologypractices.org/functional-communication-needs-assessment-translating-results-into-recommendations>

Communication and Functional Needs Assessment

Operationalize

- Diagnostic service.
 - It is NOT a hearing aid examination and selection or assessment for hearing aid.
- No exceptions standard of care.
- Typically, private pay.

Communication and Functional Needs Assessment

Operationalize

- Assess chief complaint and history of chief complaint.
- Review of diagnostic audiologic test results.
- Performance of most comfortable loudness and uncomfortable loudness.
- Perform acceptable noise level testing.
- Perform speech in noise testing.
- Unaided real ear.
- Assess with patient, via case history and hearing handicap inventories, and communication partner(s) the patient's lifestyle, their cosmetic desires, and the psychological, medical, educational, emotional, social, and/or vocational impact of chief complaint and any financial limitations.

Communication and Functional Needs Assessment

Operationalize

- Screen patient's dexterity.
- Screen patient's vision.
- Screen patient's cognitive status.
- Screen patient's auditory processing capacities.
- Screen patient's for falls risk.

Communication and Functional Needs Assessment

Operationalize

- Care plan
 - Counseling patient and their communication partner(s) on their plan of care, including but not limited to:
 - A review of all diagnostic, rehabilitative and screening measures.
 - Presentation of treatment options, as it pertains to the patient's lifestyle, their cosmetic desires, their dexterity, their cognitive status and the psychological, medical, educational, emotional, social, and/or vocational impact of chief complaint and any financial limitations.
 - Discuss potential otologic, medical, or medication management needs and provide the appropriate referrals for further evaluation and treatment.
 - Hearing aids, provider driven and over the counter.
 - Personal sound amplification products.
 - Assistive listening devices, including FM systems.
 - Ear protection.
 - Auditory rehabilitation.
 - Tinnitus management.
 - Auditory prosthetic devices.

Communication and Functional Needs Assessment

Operationalize

- Care plan
 - Basic instruction or information dissemination and counseling regarding plan of care.
 - Earmold impression, as needed.

Communication and Functional Needs Assessment

Operationalize

- Hearing Handicap Inventory Options
 - [Abbreviated Profile of Hearing Aid Benefit \(APHAB\)](#)
 - [Client Oriented Scale of Improvement \(COSI\)](#)
 - [Hearing Handicap Inventory – Adult \(HHI-A\)](#)
 - [Hearing Handicap Inventory – Elderly \(HHI-E\)](#)
 - [Hearing Handicap Inventory for Elderly – Screening \(HHIE-S\)](#)
 - [Self-Assessment for Communication \(SAC\)](#)
 - [International Outcome Inventory for Hearing Aids \(IOI-HA\)](#)
 - [Scale of Subjective Well-Being of Hearing Loss \(SWB-HL\)](#)

Communication and Functional Needs Assessment

Operationalize

- Cognition
 - <https://cognihear.com/>
 - Lin FR, Albert M. Hearing loss and dementia - who is listening?. *Aging Ment Health*. 2014;18(6):671-673.
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4075051/>
 - Shen J, Anderson MC, Arehart KH, Souza PE. Using Cognitive Screening Tests in Audiology. *Am J Audiol*. 2016 Dec 1;25(4):319-331.
 - <https://halab.soc.northwestern.edu/wp-content/uploads/2016/11/Shen-Souza-2016-Cog-tests-for-auds-AJA.pdf>
 - Humes, L Longitudinal Changes in Auditory and Cognitive Function in Middle-Aged and Older Adults *Journal of Speech Language and Hearing Research* 2021 January
 - https://pubs.asha.org/doi/full/10.1044/2020_JSLHR-20-00274
 - Humes, L Associations Between Measures of Auditory Function and Brief Assessments of Cognition, *Am J Audiol*. 2020 Dec
 - https://pubs.asha.org/doi/10.1044/2020_AJA-20-00077
 - Gottshalk, K, Olson, A Cognition and Cognitive Screeners in Audiological Management, 2020, Perspectives of the ASHA Special Interest Groups
 - https://pubs.asha.org/doi/full/10.1044/2020_PERSP-20-00015

Communication and Functional Needs Assessment

Operationalize

- Cognition
 - <https://www.audiologyonline.com/audiology-ceus/course/hearing-loss-aging-public-health-32607>
 - <https://www.audiologyonline.com/audiology-ceus/course/20q-hearing-loss-and-dementia-28840>
 - <https://www.audiologyonline.com/audiology-ceus/course/20q-hearing-loss-dementia-highlights-33354>
 - <https://www.audiologyonline.com/audiology-ceus/course/20q-importance-cognitive-assessment-in-32631>
 - <https://www.audiologyonline.com/articles/20q-hearing-science-hide-and-24038>
 - <https://www.audiologyonline.com/audiology-ceus/course/cognition-and-hearing-should-this-31367>

Communication and Functional Needs Assessment

Operationalize

- Cognition
 - Cognivue
 - <https://www.cognivue.com/>
 - Montreal Cognitive Assessment (MoCA)
 - http://www.mocatest.org/pdf_files/test/MoCA-Test-English_7_1.pdf
 - General Practitioner Assessment of Cognition (GPCOG)
 - <http://gpcog.com.au>
 - Mini-Cog
 - <https://mini-cog.com/>
 - St. Louis University Mental State (SLUMS)
 - <https://www.slu.edu/medicine/internal-medicine/geriatric-medicine/aging-successfully/assessment-tools/mental-status-exam.php>
 - Mini-Mental State Examination (MMSE)
 - <https://cgatoolkit.ca/Uploads/ContentDocuments/MMSE.pdf>

Communication and Functional Needs Assessment

Operationalize

- Auditory processing screening
 - SCAN – A
 - Dichotic Digits
 - Dichotic Sentences
 - Pitch Pattern Sequence
 - <https://www.oaktreeproducts.com/auditory-processing>
 - <https://auditec.com/price/#S-Z>

Communication and Functional Needs Assessment

Operationalize

- Loudness Measurements.
 - Acceptable Noise Level
 - <http://www.audiologyonline.com/articles/20q-acceptable-noise-level-test-basics-14403>
 - <http://www.frye.com/wp/wp-content/uploads/2013/08/ANLgeneralinstru.pdf>
 - Speech In Noise
 - QuickSIN
 - Words in Noise (WIN)
 - AZ Bio
 - Hearing In Noise Test (HINT)

Communication and Functional Needs Assessment

Monetize

- Not inclusive to TPA professional fee or inclusive hearing aid benefit.
- CPT Codes
 - 92700
 - Evaluation and management.
 - 99202/3 or 99211 or 99213.
 - As allowed by state license.

Auditory Rehabilitation – Master

Associations

- [Academy of Rehabilitative Audiology](#)

Auditory Rehabilitation – Master

Textbooks

- [Foundations of Aural Rehabilitation: Children, Adults and Their Family Members](#), Nancy Tye Murray
- [Counseling Infused Audiologic Care](#), John Greer Clark and Kristina English
- [Adult Audiologic Rehabilitation](#), Joseph Montano, Jaclyn Spitzer
- [Introduction to Auditory Rehabilitation: A Contemporary Issues Approach \(Allyn & Bacon Communication Sciences and Disorders\)](#), Carole Johnson
- [Hearing Assistive and Access Technology](#), Samuel Atcherson, Clifford Franklin, Laura-Smith-Olinde

Auditory Rehabilitation – Master

Programs

- [Amptify](#)
- [LACE](#)

Auditory Rehabilitation – Master

Guidelines and Standards

- American Speech–Language–Hearing Association:
 - [Guidelines for Audiology Service Provision in and for Schools](#)
 - [Evidence Maps](#)
- American Academy of Audiology
 - [Remote Microphone Hearing Assistance Technologies for Children and Youth from Birth to 21 Years \(Includes Supplement A\)](#)
 - [Supplement B](#)
- [British Society of Audiology](#)

Auditory Rehabilitation – Master

Training Course

- Counseling Across the Lifespan:
 - <https://www.audiologyonline.com/audiology-ceus/course/counseling-across-lifespan-presented-in-33610>
 - <https://www.audiologyonline.com/audiology-ceus/course/counseling-across-lifespan-adult-patients-33278>
 - <https://www.audiologyonline.com/audiology-ceus/course/counseling-across-lifespan-children-and-33265>

Auditory Rehabilitation – Master

Training Course

- Audiology–Psychology Collaboration:
 - <https://www.audiologyonline.com/audiology-ceus/course/rationale-for-audiology-psychology-collaboration-31317>
 - <https://www.audiologyonline.com/audiology-ceus/course/rationale-for-audiology-psychology-collaboration-31028>
 - <https://www.audiologyonline.com/audiology-ceus/course/rationale-for-audiology-psychology-collaboration-31019>

Auditory Rehabilitation – Master

Training Course

- Efficient, Effective Counseling:
 - <https://www.audiologyonline.com/audiology-ceus/course/20q-effective-counseling-information-feelings-31125>

Auditory Rehabilitation – Master

Training Course

- Current Topics in Aural Rehabilitation:
 - <https://www.audiologyonline.com/audiology-ceus/course/current-topics-in-aural-rehabilitation-28550>
- Aural Rehabilitation in Private Practice:
 - <https://www.audiologyonline.com/audiology-ceus/course/aural-rehabilitation-in-private-practice-27599>

Auditory Rehabilitation – Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-perfect-storm-for-auditory-32154>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-effective-counseling-information-feelings-31125>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-rehabilitative-audiology-remaining-competitive-28593>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-audiological-rehabilitation-back-to-35810>

Auditory Rehabilitation – Master

Resources

- [Five Keys to Communication](#)

Auditory Rehabilitation – Master

Evidence

- Sweetow, Robert and Palmer, Catherine; Efficacy of Individual Auditory Training in Adults: A Systematic Review of the Evidence, Journal of the American Academy of Audiology, Volume 16, Number 7, June 2005, pp. 494–504(11).

Auditory Rehabilitation

Operationalize

- Determine what auditory rehabilitation services and programs you want to offer in your practice. Here are some considerations:
 - Types of services offered in your auditory rehabilitation program.
 - Scope and depth of visit
 - Patient type/focus
 - Pediatric versus adult.
 - New hearing aid user.
 - Experienced hearing aid user.
 - Has handicapping hearing loss, but non-user of amplification.
 - Direct to consumer/big box retail hearing aid purchaser.
 - Auditory prosthetic device candidate or recipient.
 - Patient diagnosed with an auditory processing or cognitive deficit.

Auditory Rehabilitation

Operationalize

- Delivery of service
 - Individual
 - Group
 - Telehealth
- Type of service
 - In-office
 - “On location”
 - Restaurant
 - Theater
 - Church

Auditory Rehabilitation

Operationalize

- Length of service
 - 30 minutes
 - 60 minutes
- Your approach will determine how you communicate your program to patients and referral sources and how these visits are scheduled.

Auditory Rehabilitation

Monetize

- CPT Codes
 - 92630 or 92633, plus appropriate ALD, FM or accessory HCPCS codes.
- Not inclusive to TPA professional fee or inclusive to a hearing aid benefit.
- Not covered by Medicare.
- Sometimes covered by Medicaid and other private payers.
 - [Aetna](#)
 - [United Healthcare](#)

Tinnitus Evaluation and Management – Master

Associations

- [American Tinnitus Association](#)
- [Misophonia Association](#)

Tinnitus Evaluation and Management – Master

Networks

- [The Hyperacusis Network](#)

Tinnitus Evaluation and Management – Master

Certification

- [American Board of Audiology](#)

Tinnitus Evaluation and Management – Master

Guidelines and Standards

- [American Academy of Otolaryngology-Head and Neck Surgery](#)
- [American Academy of Audiology](#)
- British Society of Audiology
 - <https://www.thebsa.org.uk/wp-content/uploads/2020/03/OD104-88-BSA-Combination-aids-practice-guidance.pdf>
 - <https://www.thebsa.org.uk/wp-content/uploads/2015/03/2015-Paed-Tin-Guidelines-FINAL.pdf>

Tinnitus Evaluation and Management – Master

Training Courses

- [Jasterboff Tinnitus Training Courses](#)
- [Tinnitus Care Certificate Program](#)
- [Misophonia Association](#)

Tinnitus Evaluation and Management – Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-tinnitus-developing-practical-management-33660>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-audiological-care-for-patients-33137>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-update-perspectives-on-hyperacusis-30056>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-tinnitus-and-hyperacusis-beyond-27496>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-tinnitus-and-hyperacusis-reassessment-27330>

Tinnitus Evaluation and Management – Master

Webinars

- Tinnitus:
 - <https://www.audiologyonline.com/audiology-ceus/course/summer-webinar-series-tinnitus-28090>
 - <https://www.audiologyonline.com/audiology-ceus/course/care-path-for-patients-with-27906>
 - <https://www.audiologyonline.com/audiology-ceus/course/tinnitus-activities-treatment-33539>
 - <https://www.audiologyonline.com/audiology-ceus/course/hearing-loss-and-tinnitus-treatment-33246>
 - <https://www.audiologyonline.com/audiology-ceus/course/three-considerations-for-helping-patients-32864>
 - <https://www.audiologyonline.com/audiology-ceus/course/principles-tinnitus-evaluation-and-management-31860>
 - <https://www.audiologyonline.com/audiology-ceus/course/sound-approaches-to-tinnitus-management-29715>
 - <https://www.audiologyonline.com/audiology-ceus/course/signia-expert-series-tinnitus-activities-29399>
 - <https://www.audiologyonline.com/audiology-ceus/course/tinnitus-treatment-with-acoustic-and-28608>
 - <https://www.audiologyonline.com/audiology-ceus/course/efficacy-individual-components-tinnitus-management-28692>
 - <https://www.audiologyonline.com/audiology-ceus/course/exploring-mindfulness-with-challenging-tinnitus-26026>

Tinnitus Evaluation and Management – Master

Webinars

- Hyperacusis:
 - <https://www.audiologyonline.com/audiology-ceus/course/hyperacusis-and-my-misophobia-34112>
 - <https://www.audiologyonline.com/audiology-ceus/course/continued-conversations-ce-podcast-hyperacusis-33708>
- Misophonia:
 - <https://www.audiologyonline.com/audiology-ceus/course/clinicians-guide-to-misophonia-34507>

Tinnitus Evaluation and Management

Operationalize

- Comprehensive review of systems.
 - Otologic history
- Documentation of current medications.
- History of drug, tobacco, alcohol and marijuana use.
- History of occupational and recreational noise exposure.
- Tinnitus
 - Onset.
 - Duration.
 - Impact on quality of life.

Tinnitus Evaluation and Management

Operationalize

- Inventories
 - [Tinnitus Handicap Inventory \(THI\)](#)
 - [Tinnitus Reaction Questionnaire \(TRQ\)](#)
 - [Tinnitus Functional Index \(TFI\)](#)
 - Depression inventories
 - [Depression Scale \(DEPS\)](#)
 - [Geriatric Depression Scale \(GDS\)](#)
 - [Patient Health Questionnaire \(PHQ-9\)](#)
 - [Beck Depression Inventory \(BDI or BDI-II\)](#)
 - [Center for Epidemiologic Studies Depression Scale \(CES-D\)](#)
 - [Duke Anxiety-Depression Scale \(DADS\)](#)
 - [Cornell Scale Screening](#)
 - [PRIME MD-PHQ2](#)

Tinnitus Evaluation and Management

Monetize

- Evaluation
 - Evaluation and management
 - As allowed by state scope of practice.
 - 99202-99203 (new patient), 99212-99213 (existing patient) or 92700.
 - Test battery
 - Comprehensive hearing test (92557)
 - Tympanometry and acoustic reflex testing (92550)
 - Otoacoustic emissions, limited or comprehensive (92587 or 92588)
 - Assessment of tinnitus (92625)
 - Unlisted procedure (92700)
 - High-frequency audiometry

Tinnitus Evaluation and Management

Monetize

- Treatment/Management/Counseling
 - Depression screen, in isolation (96127; as allowed by state license)
 - Individual (98960 or 92700)
 - Group (98962 or 92700)
 - Telehealth (change place of service to 2 and/or add 95 modifier)
 - Hearing aids
 - Sound generating devices
 - V5267

Tinnitus Evaluation and Management

Monetize

- Managed Care
 - Medicare does not cover tinnitus maskers or sound generating devices or tinnitus treatment, management or counseling. Some third-party payers have guidance as to the coverage of tinnitus evaluation and management. These include, but are not limited to:
 - [Aetna](#)
 - [Humana](#)
 - Tinnitus policies for Blue Cross Blue Shield (BCBS) plans vary state to state. Please consult your state BCBS plan guidance and medical/coverage policies for more information.

Vestibular Evaluation and Management – Master

Associations

- [Vestibular Disorders Association](#)

Vestibular Evaluation and Management – Master

Textbooks

- [Balance Function Assessment and Management](#), by Gary Jacobson, Neil Shepard, Kamran Barin, Robert Burkard, Kristen Jacky, and Devin McCaslin
- [Vestibular Function](#), by Alan Desmond
- [Manual of Pediatric Balance Disorders](#), by Robert O'Reilly, Thierry Morlet, Sharon Cushing, and Jacob R. Brodsky
- [Falls Assessment and Prevention: Home, Hospital, and Extended Care](#), by Lynn Alvord

Vestibular Evaluation and Management – Master

Resources

- [STEADI Program](#)

Vestibular Evaluation and Management – Master

Guidelines and Standards

- American Academy of Otolaryngology–Head and Neck Surgery:
 - [Benign Paroxysmal Positional Vertigo \(BPPV\)](#)
 - [Meniere's Disease](#)
- British Society of Audiology:
 - <https://www.thebsa.org.uk/wp-content/uploads/2014/04/Recommended-procedure-for-the-Caloric-test.pdf>
 - <https://www.thebsa.org.uk/wp-content/uploads/2016/09/OD104-48-Recommended-Procedure-Positioning-Tests-September-2016.pdf>
 - <https://www.thebsa.org.uk/wp-content/uploads/2015/04/OD104-38-Recommended-Procedure-Vestibular-Assessment-Eye-Movement.pdf>
 - <https://www.thebsa.org.uk/wp-content/uploads/2019/12/Practice-Guidance-VRT-November-2019.pdf>

Vestibular Evaluation and Management – Master

Training Courses

- [American Institute of Balance](#)
- [Interacoustics](#)
- [Natus](#)
- [Vestibular Disorders Association](#)

Vestibular Evaluation and Management – Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-pediatric-vestibular-disorders-and-27855>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-why-all-audiologists-should-34857>

Vestibular Evaluation and Management – Master

Assessment

- <https://www.youtube.com/watch?v=UhjhBh5gc34&feature=youtu.be>
- <http://www.mnfallsprevention.org/professional/assessmenttools.html>
- <https://www.audiologyonline.com/audiology-ceus/course/vestibular-education-and-rehabilitation-presented-33989>
- <https://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-journal-club-relationships-34025>
- <https://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-journal-club-vestibular-32240>
- <https://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-journal-club-what-30147>
- <https://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-journal-club-vestibular-28549>
- <https://www.audiologyonline.com/audiology-ceus/course/pediatric-balance-disorders-where-we-29265>
- <https://www.audiologyonline.com/audiology-ceus/course/advanced-vestibular-assessment-26387>
- <https://www.audiologyonline.com/audiology-ceus/course/vestibular-balance-assessment-athletes-25648>

Vestibular Evaluation and Management – Master

Management/rehabilitation

- <https://www.audiologyonline.com/audiology-ceus/course/vestibular-rehabilitation-presented-in-partnership-33607>
- <https://www.audiologyonline.com/audiology-ceus/course/issues-in-vestibular-management-26224>

Vestibular Evaluation and Management

Operationalize

- Equipment and Supplies:
 - Foam:
 - <https://www.dizzy.com/product-category/therapy-evaluation-materials/>
 - Examination/treatment table
 - Exam chair or table
 - Massage table
 - Electronic/computerized
 - [Interacoustics](#)
 - [Natus](#)

Vestibular Evaluation and Management

Operationalize

- Comprehensive review of systems.
- Documentation of current medications.
- History of drug, tobacco, alcohol and marijuana use.
- History of occupational and recreational noise exposure.
- Vestibular
 - Onset.
 - Duration.
 - Impact on quality of life.

Vestibular Evaluation and Management

Operationalize

- Screenings
 - [Postural Blood Pressure](#)
 - [Balance and Vestibular Assessment Tools](#)
 - [Get up and Go](#)
 - [Tinetti Balance and Gait Assessment](#)
 - [Berg Balance and Gait Assessment](#)
- Inventory
 - [Dizziness Handicap Inventory](#)

Vestibular Evaluation and Management

Operationalize/Monetize

- Evaluation and management
 - As allowed by state scope of practice.
 - 99202-99203 (new patient) or 99212-99213 (existing patient).
- Screening
 - Physical performance test or measurement, with written report, each 15 minutes (97750)
 - Balance, gait and falls risk assessment.
 - Billed with units.

Vestibular Evaluation and Management

Operationalize/Monetize

- Test battery (as medically necessary)
 - Comprehensive hearing test (92557)
 - Tympanometry (92567)
 - Spontaneous nystagmus test, without recording (92531)
 - Non-covered by Medicare and other payers.
 - Typically, a private pay service.
- Positional nystagmus test, without recording (92532)
 - Can be used to represent a Hallpike in isolation without recording.
 - Non-covered by Medicare and other payers.
 - Typically, a private pay service.

Vestibular Evaluation and Management

Operationalize/Monetize

- Basic vestibular evaluation, with recording (92540)
 - Spontaneous nystagmus test, including gaze and fixation nystagmus (92541)
 - Positional nystagmus test, minimum of four positions (92542)
 - Optokinetic nystagmus test, bi-directional, foveal or peripheral stimulation (92544)
 - Oscillating tracking test (92545)
- Caloric testing, binaural, bithermal (92537)
- Caloric testing, binaural, monothermal (92538)

Vestibular Evaluation and Management

Operationalize/Monetize

- Vestibular Evoked Myogenic Potentials (VEMPs)
 - Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report, cervical (cVEMP; 92517)
 - Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report, ocular (oVEMP; 92518)
 - Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report, cervical (cVEMP) and ocular (oVEMP;; 92519)

Vestibular Evaluation and Management

Operationalize/Monetize

- Use of vertical electrodes (add-on code; 92547)
 - For electronystagmography (ENG) only, except for First Coast Florida Medicare.
- Sinusoidal vertical axis rotational testing (92546)
 - Requires a rotational chair.
- Computerized dynamic posturography sensory organization test (CDP-SOT), 6 conditions (ie, eyes open, eyes closed, visual sway, platform sway, eyes closed platform sway, platform and visual sway), including interpretation and report (92548)
 - Requires a posturography platform.
- Computerized dynamic posturography sensory organization test (CDP-SOT), 6 conditions (ie, eyes open, eyes closed, visual sway, platform sway, eyes closed platform sway, platform and visual sway), with motor control test (MCT) and adaptation test (ADT), including interpretation and report (92549)
 - Requires a posturography platform.

Vestibular Evaluation and Management

Operationalize/Monetize

- Unlisted otorhinolaryngological item or service (92700)
 - Use of goggles
 - Sensory Organization Test
 - Fistula testing
 - Saccade testing
 - Vhit
 - Fukada
 - Vestibular autorotation test (VAT)
 - Head thrust testing
 - Fistula testing
 - Generally non-covered by third-party payers and typically the financial responsibility of the patient.

Vestibular Evaluation and Management

Operationalize/Monetize

- Treatment/Management
 - Canalith repositioning procedure(s), per day (95992)
 - Non-covered by traditional Medicare.
 - Can be billed “incident to” a physician.
 - Neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and proprioception (97112)
 - As allowed by state licensure laws.
 - Non-covered by Medicare if provided by an audiologist.
- Appointment types and lengths
 - This will vary based upon the scope of your vestibular practice.
- The scope of your vestibular practice will influence the type and amount of equipment required.

Vestibular Evaluation and Management

Monetize

- Managed Care
 - Most vestibular treatment is non-covered if provided by an audiologist. There though is a HUGE market for accessible, affordable vestibular management and rehabilitation, including home falls hazards assessments.
 - Some third-party payers have guidance as to the coverage of vestibular evaluation and management. These include, but are not limited to:
 - [Aetna](#)
 - [Humana](#)
 - Vestibular policies for Blue Cross Blue Shield (BCBS) plans vary state to state. Please consult your state BCBS plan guidance and medical/coverage policies for more information.
 - Individual Medicare Administrative Contractors can have Local Coverage Determinations related to vestibular evaluation and management. Those can be found here: [Local Coverage Determination Database](#)

Auditory Processing Evaluation and Management – Master

Research

- J. C. Cooper Jr. and G. A. Gates, "Hearing in the Elderly—The Framingham Cohort, 1983–1985: Part II. Prevalence of Central Auditory Processing Disorders," *Ear and Hearing*, Vol. 12, No. 5, 1991, pp. 304–311.

Auditory Processing Evaluation and Management – Master

Textbooks

- [Handbook of Central Auditory Processing Disorder, Volume I: Auditory Neuroscience and Diagnosis](#), by Frank Musiek and Gail Chermak
- [Handbook of Central Auditory Processing Disorder, Volume II: Comprehensive Intervention](#), by Frank Musiek and Gail Chermak
- [Assessment and Management of Central Auditory Processing Disorders in the Educational Setting: From Science to Practice](#), by Teri Bellis
- [Central Auditory Processing: A Transdisciplinary View](#), by Jack Katz, Nancy Stecker, and Donald Henderson
- [Auditory Processing Disorders: Assessment, Management, and Treatment](#), Donna Geffner and Deborah Ross-Swain
- [Controversies in Central Auditory Processing Disorder](#), by Anthony Cacace and Dennis McFarland

Auditory Processing Evaluation and Management – Master

Guidelines and Standards

- [British Society of Audiology](#)
- [American Academy of Audiology](#)

Auditory Processing Evaluation and Management – Master

Training Courses

- [Auditory Processing Institute](#)
- [Jack Katz, PhD](#)

Auditory Processing Evaluation and Management – Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-capd-fundamentals-27991>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-capd-diagnosis-and-intervention-28103>

Auditory Processing Evaluation and Management – Master

Webinars

- <https://www.audiologyonline.com/audiology-ceus/course/what-audiologists-need-to-know-32912>
- <https://www.audiologyonline.com/audiology-ceus/course/auditory-processing-disorder-and-blast-31270>
- <https://www.audiologyonline.com/audiology-ceus/course/maturation-central-auditory-nervous-system-29034>
- <https://www.audiologyonline.com/audiology-ceus/course/auditory-processing-disorders-application-and-40011>
- <https://www.audiologyonline.com/audiology-ceus/course/pediatric-processing-disorders-interdisciplinary-roles-40063>
- <https://www.audiologyonline.com/audiology-ceus/course/treatment-from-the-apd-trenches-26856>

Auditory Processing Evaluation and Management

Operationalize

- Comprehensive review of systems.
- Documentation of current medications.
- History of drug, tobacco, alcohol and marijuana use.
- History of occupational and recreational noise exposure.
- Family history of hearing loss and/or auditory processing disorders.
- Auditory and/or communication difficulties.
- Speech-language history.
- Educational/occupational history.
- Social development.
- Linguistic background.

Auditory Processing Evaluation and Management

Operationalize/Monetize

- Evaluation and management
 - As allowed by state scope of practice.
 - 99202-99203 (new patient) or 99212-99213 (existing patient).
- Inventories
 - [Hearing Handicap Inventory \(HHI\)](#)
 - [SAC](#)
- Screenings
 - [SCAN](#)
 - Developmental screening (e.g. developmental milestone survey, speech and language delay screen), with scoring and documentation, per standardized instrument (96110)
 - As allowed by state licensure.

Auditory Processing Evaluation and Management

Operationalize/Monetize

- Possible test battery for evaluation
 - Comprehensive hearing test (92557)
 - Tympanometry and acoustic reflex threshold testing (92550)
 - Otoacoustic emissions testing, limited or comprehensive (92587 or 92588)
 - Auditory evoked potentials; for threshold determination at multiple frequencies, with interpretation and report (92652)
 - Replaces 92585.
 - Used for a threshold search ABR, ASSR., or middle/late latency testing.
 - Auditory evoked potentials; neurodiagnostic, with interpretation and report (92653)
 - Replaces 92585.
 - Used for site of lesion testing.
 - No TC/PC Split.
 - Evaluation of central auditory processing, with report; initial 60 minutes (92620)
 - Evaluation of central auditory processing, with report; each additional 15 minutes (92621)

Auditory Processing Evaluation and Management

Operationalize/Monetize

- Filtered speech test (92571)
 - Performed in isolation.
- Staggered spondaic word test (92572)
 - Performed in isolation.
- Synthetic sentence identification test (92576)
 - Performed in isolation.

Auditory Processing Evaluation and Management

Operationalize/Monetize

- Medical team conference with interdisciplinary team of health care professionals, face-to-face with patient and/or family, 30 minutes or more; participation by non-physician qualified health care professional (99366).
 - As allowed by state licensure.
- Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by non-physician qualified health care professional (99368).
 - As allowed by state licensure.

Auditory Processing Evaluation and Management

Operationalize/Monetize

- Unlisted otorhinolaryngological item or service (92700)
 - Patient/parent counseling regarding test results.
 - Speech-in-noise testing.
 - High-frequency audiometry.
 - Generally not covered by third-party payers.

Auditory Processing Evaluation and Management

Operationalize/Monetize

- Treatment
 - Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual (92507)
 - Auditory rehabilitation (92630/92633)
 - Individual (98960 or 92630/3)
 - Group (98962)
 - Telehealth (change place of service to 2 and/or add 95 modifier)

Auditory Processing Evaluation and Management

Operationalize

- “Equipment”
 - [Auditec](#)
 - [Oaktree Products](#)
 - [Pearson](#)
 - [Precision Acoustics](#)

Auditory Processing Evaluation and Management

Monetize

- Medicare does not cover rehabilitation of auditory processing disorders provided by an audiologist. Some third-party payers have guidance as to the coverage of auditory processing. These include, but are not limited to:
 - [Aetna](#)
 - Auditory processing evaluation and management policies for Blue Cross Blue Shield (BCBS) plans vary state to state. Please consult your state BCBS plan guidance and medical/coverage policies for more information.

Implantable Device Evaluation and Management –Master

Associations

- [American Cochlear Implant Alliance](#)

Implantable Device Evaluation and Management – Master

Certification

- [American Board of Audiology](#)

Implantable Device Evaluation and Management – Master

Textbooks

- [Implantable Hearing Devices](#), by Chris de Souza, Peter Roland, and Debara Tucci
- [Cochlear Implants and Other Implantable Hearing Devices](#), by Michael J. Ruckenstein
- [Cochlear Implant Patient Assessment: Evaluation of Candidacy, Performance, and Outcomes](#), by Rene Gifford
- [Programming Cochlear Implants](#), by Jace Wolfe and Erin Schafer
- [Clinical Management of Children With Cochlear Implants](#), Laurie Eisenberg

Implantable Device Evaluation and Management –Master

Manufacturer Resources/Network Opportunities

- [Advanced Bionics](#)
- [Cochlear Provider Network](#)
- [Med-El](#)

Implantable Device Evaluation and Management –Master

Guidelines/Standards

- [American Speech Language Hearing Association](#)
- [American Academy of Audiology](#)

Implantable Device Evaluation and Management -Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-overview-new-cochlear-implant-33210>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-combining-electric-and-acoustic-29668>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-auditory-brainstem-implants-continued-26922>

Implantable Device Evaluation and Management – Master

AudiologyOnline

- <https://www.audiologyonline.com/audiology-ceus/course/adult-perceptions-cochlear-implants-helping-34493>
- <https://www.audiologyonline.com/audiology-ceus/course/candidacy-expansion-and-improved-outcomes-33513>
- <https://www.audiologyonline.com/audiology-ceus/course/best-practices-and-beyond-cochlear-33372>
- <https://www.audiologyonline.com/audiology-ceus/course/best-practices-for-cochlear-implant-33025>
- <https://www.audiologyonline.com/audiology-ceus/course/best-practices-for-cochlear-implant-32897>
- <https://www.audiologyonline.com/audiology-ceus/course/expanding-indications-for-cochlear-implantation-31181>
- <https://www.audiologyonline.com/audiology-ceus/course/pediatric-bone-anchored-protocol-30185>

Implantable Device Evaluation and Management

Operationalize

- Comprehensive review of systems.
- Documentation of current medications.
- History of drug, tobacco, alcohol and marijuana use.
- History of occupational and recreational noise exposure.
- Family history of hearing loss.
- Auditory and/or communication difficulties.
- Speech-language history.
- Social development.
- Educational/occupational history.
- Linguistic background.

Implantable Device Evaluation and Management

Operationalize

- Evaluation and management.
 - As allowed by state scope of practice.
 - 99202-99203 (new patient) or 99212-99213 (existing patient).
- Inventories.
 - [Hearing Handicap Inventory \(HHI\)](#)
 - [Characteristics of Amplification Tool \(COAT\)](#)
 - [Abbreviated Profile of Hearing Aid Benefit \(APHAB\)](#)
 - [International Outcome Inventory for Hearing Aids \(IOI-HA\)](#)
 - [SAC](#)
 - [Client Oriented Scale of Improvement \(COSI\)](#)

Implantable Device Evaluation and Management

Operationalize

- Equipment and Supplies:
 - [AZ Bio/Minimal Speech Test Battery](#)
 - [Speech in Noise materials.](#)
 - Manufacturer hardware and software
 - Soundfield test capacity.

Implantable Device Evaluation and Management

Operationalize/Monetize

- Test battery–Candidacy for Cochlear Implant
 - Comprehensive hearing test (92557)
 - Visual reinforcement audiometry (92579)
 - Conditioned play audiometry (92582)
 - Select picture audiometry (92583)
 - Tympanometry and acoustic reflex threshold testing (92550)
 - Otoacoustic emissions testing, limited or comprehensive (92587 or 92588)

Implantable Device Evaluation and Management

Operationalize/Monetize

- Auditory evoked potentials (92651, 92652 or 92653)
- Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour (92626)
- Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes (92627)
- Vestibular evoked myogenic potential (92517, 92518 or 92519)
- Team meetings (99366 and 99368)
- Unlisted otorhinolaryngological item or service.
 - Vhit
 - Generally non-covered by third-party payers and typically the financial responsibility of the patient.

Implantable Device Evaluation and Management

Operationalize/Monetize

- Test battery–Candidacy for Auditory Osseointegrated Device
 - Comprehensive hearing test (92557)
 - Tympanometry and acoustic reflex threshold testing (92550)
 - Otoacoustic emissions testing, limited or comprehensive (92587 or 92588)
 - Auditory evoked potentials (92651, 92652 or 92653)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour (92626)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes (92627)
 - Team meetings (99366 and 99368)

Implantable Device Evaluation and Management

Operationalize/Monetize

- Intraoperative for Cochlear Implant
 - Neural-telemetry (92584)
 - Intraoperative monitoring (95907) and auditory brainstem response, comprehensive (92585)
 - Standby service, requiring prolonged attendance, each 30 minutes (99360)

Implantable Device Evaluation and Management

Operationalize/Monetize

- Activation of a Cochlear Implant
 - Diagnostic analysis of cochlear implant, patient under 7 years of age; with programming (92601) or Diagnostic analysis of cochlear implant, age 7 years or older, with programming (92603)
 - Neural-telemetry (92584)
 - -59 modifier
 - eSRT (92568)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour (92626)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes (92627)
 - Auditory rehabilitation (92630 or 92633)
 - Non-covered by Medicare and most private payers.
 - Unlisted otorhinolaryngological item or service (92700)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device testing that is less than 31 minutes.
 - Cochlear implant processor and hardware fitting and orientation.
 - Generally non-covered by third-party payers and typically the financial responsibility of the patient.

Implantable Device Evaluation and Management

Operationalize/Monetize

- Activation of an Auditory Osseointegrated Device
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour (92626)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes (92627)
 - Auditory rehabilitation (92630 or 92633)
 - Non-covered by Medicare and most private payers.
 - Unlisted otorhinolaryngological item or service (92700)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device testing that is less than 31 minutes.
 - Auditory osseointegrated device processor and hardware fitting and orientation.
 - Generally non-covered by third-party payers and typically the financial responsibility of the patient.

Implantable Device Evaluation and Management

Operationalize/Monetize

- Long-term care and management of a cochlear implant
 - Diagnostic analysis of cochlear implant, patient under 7 years of age; with subsequent reprogramming (92602) or Diagnostic analysis of cochlear implant, age 7 years or older, with subsequent reprogramming (92604)
 - Add a -50 modifier for bilateral programming or list as two separate line items on the claim, with a RT and LT modifier attached to the code.
 - Neural-telemetry (92584)
 - -59 modifier.
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour (92626)
 - Auditory rehabilitation (92630 or 92633)
 - Non-covered by Medicare and most private payers.
 - Unlisted otorhinolaryngological item or service (92700)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device testing that is less than 31 minutes.
 - Cochlear implant troubleshooting and service.
 - Assistive listening device, accessory or FM system fitting and orientation.
 - Generally non-covered by third-party payers and typically the financial responsibility of the patient.

Implantable Device Evaluation and Management

Operationalize/Monetize

- Long-term management of an auditory osseointegrated device
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour (92626)
 - Auditory rehabilitation (92630 or 92633)
 - Non-covered by Medicare and most private payers.
 - Unlisted otorhinolaryngological item or service (92700)
 - Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device testing that is less than 31 minutes.
 - Auditory osseointegrated device troubleshooting and service.
 - Assistive listening device, accessory or FM system fitting and orientation.
 - Generally non-covered by third-party payers and typically the financial responsibility of the patient.

Implantable Device Evaluation and Management

Monetize

- Most third-party payers have guidance as to the coverage of auditory prosthetic devices. These include, but are not limited to:
 - Aetna
 - [Cochlear and Auditory Brainstem Implants](#)
 - [Electrocochleogram and Perilymphatic Pressure Measurement](#)
 - [Bone Anchored Hearing Aids](#)
 - Cigna
 - [Cochlear and Auditory Brainstem Implants](#)
 - [Humana](#)
 - United Healthcare
 - [Cochlear Implant](#)
 - [Bone Anchored Devices](#)
 - Auditory prosthetic device guidance for Blue Cross Blue Shield (BCBS) plans vary state to state. Please consult your state BCBS plan guidance and medical/coverage policies for more information.
 - Individual Medicare Administrative Contractors can have Local Coverage Determinations related to auditory prosthetic devices. Those can be found here:
 - [Cochlear Implant](#)

Implantable Device Evaluation and Management

Monetize

- I strongly advise against practice's purchasing any new or replacement hardware and billing a third-party payer on the patient's behalf. These transactions should occur between the patient and their respective manufacturer. Durable medical equipment billing, such as this, comes with caveats, especially as it pertains to Medicare and Medicaid.

Pediatrics – Master

Associations

- [National Center of Hearing Assessment and Management](#)
- [Educational Audiology Association](#)

Pediatrics – Master

Certification

- [American Board of Audiology](#)

Pediatrics – Master

Textbooks

- [Pediatric Audiology](#), by Jane Madell, Carol Flexer, Jace Wolfe, and Erin Shafer
- [Comprehensive Handbook of Pediatric Audiology](#), by Anne Marie Tharpe and Richard Seewald
- [Newborn Screening Systems: The Complete Perspective](#), by Carlie Driscoll and Bradley McPherson
- [Foundations of Pediatric Audiology](#), by Fred Bess and Judith Gravel
- [Hearing in Children](#), by Jerry Northern and Marion Downs
- [Pediatric Amplification: Enhancing Auditory Access](#), by Ryan McCreery and Elizabeth Walker

Pediatrics – Master

Evidence

- American Speech-Language-Hearing Association:
 - [Hearing Assessment in Infants and Children: Recommendations Beyond Neonatal Screening](#)
 - [Hearing Loss – Newborn](#)
 - [Hearing Loss – Early Childhood](#)
 - [Hearing Loss – School Age](#)

Pediatrics – Master

Guidelines and Standards

- American Academy of Audiology:
 - [Assessment of Hearing in Infants and Young Children](#)
 - [Childhood Hearing Screening](#)
- American Academy of Otolaryngology–Head and Neck Surgery:
 - [Tympanostomy Tubes in Children](#)
- British Society of Audiology:
 - [Auditory Brainstem Response \(ABR\) Testing in Babies](#)
 - [Visual Reinforcement Audiometry](#)
 - [Behavioural Observational Audiometry](#)
 - [Guidelines for the early audiological assessment and management of babies referred from the Newborn Hearing Screening Programme](#)

Pediatrics – Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-unilateral-hearing-loss-in-31837>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-preschool-hearing-screening-essential-29394>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-cross-check-principle-in-26777>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-pediatric-speech-recognition-measures-26788>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-abr-assessment-in-infants-25165>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-abr-assessment-in-infants-25018>

Pediatrics – Master

Webinars

- <https://www.audiologyonline.com/audiology-ceus/course/vanderbilt-audiology-s-journal-club-25768>
- <https://www.audiologyonline.com/audiology-ceus/course/school-audiology-and-community-partnerships-30988>
- <https://www.audiologyonline.com/audiology-ceus/course/maximizing-outcomes-for-children-with-26492>
- <https://www.audiologyonline.com/audiology-ceus/course/pediatric-audiologist-in-early-hearing-33391>
- <https://www.audiologyonline.com/audiology-ceus/course/using-outcome-measures-to-optimize-33250>
- <https://www.audiologyonline.com/audiology-ceus/course/counseling-across-lifespan-children-and-33265>
- <https://www.audiologyonline.com/audiology-ceus/course/maximizing-outcomes-for-children-in-30088>

Pediatrics – Master

Webinars

- <https://www.audiologyonline.com/audiology-ceus/course/expanding-pediatric-services-through-telehealth-28828>
- <https://www.audiologyonline.com/audiology-ceus/course/telepractice-using-distance-technology-to-40166>
- <https://www.audiologyonline.com/audiology-ceus/course/infant-abr-protocols-diagnosis-and-28052>
- <https://www.audiologyonline.com/audiology-ceus/course/managing-hearing-loss-in-children-28051>
- <https://www.audiologyonline.com/audiology-ceus/course/assessing-functional-auditory-performance-in-27929>
- <https://www.audiologyonline.com/audiology-ceus/course/individualizing-pediatric-hearing-aid-27380>
- <https://www.audiologyonline.com/audiology-ceus/course/pediatric-hearing-aid-verification-part2-27381>
- <https://www.audiologyonline.com/audiology-ceus/course/assessment-and-management-children-with-26442>

Pediatrics

Operationalize

- Equipment and Supplies:
- Pediatric sized insert, otoscope, and tympanometry tips
- Visual reinforcement equipment
- Conditioned play toys and games
- Spondee board
- WIPI, PBK-50 or NU-Chips
 - <https://auditec.com/price/>
 - <https://www.oaktreeproducts.com/speech-audiometry>
- Soundfield test capacity
- Otoacoustic emissions
- Auditory brainstem response equipment

Pediatrics

Operationalize

- Comprehensive review of systems.
 - Birth history.
 - Developmental history.
 - Speech-language history.
- Documentation of current medications.
- History of drug, alcohol, or tobacco use (adolescents).
- Educational status and history.

Pediatrics

Operationalize/Monetize

- Potential test battery
 - Newborn hearing screening
 - Otoacoustic emissions, screening (92558)
 - Auditory evoked potentials; screening of auditory potential with broadband stimuli, automated analysis (92650)

Pediatrics

Operationalize/Monetize

- Diagnostic Evaluation (test battery will vary by age and developmental capacity)
 - Visual reinforcement audiometry (92579)
 - Conditioned play audiometry (92582)
 - Select picture audiometry (92583)
 - Pure-tone, air conduction threshold testing (92552)
 - Pure-tone, air and bone conduction threshold testing (92553)
 - Speech awareness/threshold testing (92555)
 - Comprehensive hearing test (92557)
 - Tympanometry (92567)
 - Tympanometry and acoustic reflex testing (92550)
 - Otoacoustic emissions, limited or comprehensive (92587 or 92588)
 - Auditory evoked potentials; for hearing status determination, broadband stimuli, with interpretation and report (92651) or Auditory evoked potentials; for threshold determination at multiple frequencies, with interpretation and report (92652)
 - Unlisted otorhinolaryngological item or service (92700)
 - Behavioral observation audiometry.

Pediatrics

Operationalize/Monetize

- Team meetings (99366 or 99368)
- Treatment/Management/Counseling
 - Auditory rehabilitation (92630 or 92633)
 - Hearing aids.
 - CROS/BICROS
 - Auditory prosthetic devices.
 - Assistive listening devices and FM systems

Hearing Conservation – Master

Associations

- [National Hearing Conservation Association](#)

Hearing Conservation – Master

Programs

- [Occupational Safety and Health Administration](#)
- [National Institute of Occupational Safety and Health](#)
- [Dangerous Decibels](#)

Hearing Conservation – Master

Certification

- [Council for Accreditation in Occupational Hearing Conservation](#)

Hearing Conservation – Master

Textbooks

- [Hearing Conservation](#), by Vishakha Waxman Rawool
- [Hearing Loss in Musicians](#), by Marshall Chasin

Hearing Conservation – Master

Guidelines and Standards

- American Academy of Audiology:
 - [Musicians and Music Industry Personnel](#)
 - [Preventing Noise-Induced Occupational Hearing Loss](#)
- [American Speech-Language-Hearing Association](#)
- British Society of Audiology:
 - [Surveillance Audiometry](#)

Hearing Conservation – Master

Training Courses

- [Sensaphonics](#)
- [Council for Accreditation in Occupational Hearing Conservation](#)

Hearing Conservation – Master

20Q

- <https://www.audiologyonline.com/audiology-ceus/course/20q-shot-prevention-hearing-loss-29219>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-ototoxicity-and-audiology-insights-35665>

Hearing Conservation – Master

Webinars

- <https://www.audiologyonline.com/audiology-ceus/course/current-topics-in-noise-induced-42080>
- <https://www.audiologyonline.com/audiology-ceus/course/best-practices-for-music-industry-33289>
- <https://www.audiologyonline.com/audiology-ceus/course/leisure-noise-and-hearing-presented-32754>
- <https://www.audiologyonline.com/audiology-ceus/course/prevention-noise-induced-hearing-loss-32488>
- <https://www.audiologyonline.com/audiology-ceus/course/managing-musician-with-hearing-loss-32378>
- <https://www.audiologyonline.com/audiology-ceus/course/managing-musician-with-hearing-loss-32161>
- <https://www.audiologyonline.com/audiology-ceus/course/pharmacology-and-mechanisms-ototoxicity-for-32063>
- <https://www.audiologyonline.com/audiology-ceus/course/current-topics-in-noise-induced-31602>
- <https://www.audiologyonline.com/audiology-ceus/course/acoustic-trauma-from-recreational-noise-31324>
- <https://www.audiologyonline.com/audiology-ceus/course/10th-annual-noise-induced-hearing-29765>
- <https://www.audiologyonline.com/audiology-ceus/course/world-health-organization-make-listening-29588>
- <https://www.audiologyonline.com/audiology-ceus/course/nihl-webinar-series-working-with-26346>
- <https://www.audiologyonline.com/audiology-ceus/course/20q-audiologic-care-musicians-36100>

Hearing Conservation

Operationalize/Monetize – Ototoxicity Monitoring

- Who is this program appropriate for:
 - Any individual who is about to undergo or who has undergone a medical intervention which includes an ototoxic medication or medical intervention.
 - [Common Ototoxic Agents](#)
 - A relationship needs to be established between your practice, physicians who specialize in disciplines who frequently prescribe ototoxic agents in the typical course of care (oncology, infectious disease, cardiology, vascular medicine, urology, rheumatology, psychiatry, and otolaryngology).
 - The specialist needs to understand and appreciate the value and importance of audiologic and vestibular monitoring to their patient, their ability to communicate and actively participate in their care and their quality of life.

Hearing Conservation

Operationalize/Monetize – Ototoxicity Monitoring

- Scheduling
 - The goal is to have the individual undergo a baseline hearing test or screening before beginning the medical treatment.
 - You will need to work with the specialist and their staff, including pharmacists, to schedule this testing and to establish a test sequence and regime that is conducive to the treatment protocol and course.

Hearing Conservation

Operationalize/Monetize – Ototoxicity Monitoring

- Case history
 - Comprehensive review of systems.
 - Otologic history
 - Documentation of current medications.
 - History of drug, tobacco, alcohol and marijuana use.
 - History of occupational and recreational noise exposure.
 - Inventories
 - [Hearing Handicap Inventory \(HHI\)](#)
 - [Tinnitus Handicap Inventory \(THI\)](#)
 - [Dizziness Handicap Inventory \(DHI\)](#)
- Special Equipment Considerations
 - High-frequency audiometer
 - Otoacoustic emissions
 - Foam
 - <https://www.dizzy.com/product-category/therapy-evaluation-materials/>

Hearing Conservation

Operationalize/Monetize – Ototoxicity Monitoring

- Testing
 - Audiologic
 - Comprehensive audiogram (92557)
 - Tympanometry and acoustic reflex threshold testing (92550)
 - High-frequency audiometry (92700)
 - Otoacoustic emissions (92587 or 92588)
 - Vestibular
 - Falls Risk Assessment
 - Sensory Organization Test

Hearing Conservation

Operationalize/Monetize – Industrial Conservation

- Who is this program appropriate for:
 - Industries whose workplace produces noise in the course of business.
 - These industrial settings need to be monitored for their noise exposure levels.
 - Any individual who works in a setting where they are exposed to noise which exceeds a time-weighted average (TWA) noise level of 85 decibels (dBA) or higher over an 8-hour work shift.

Hearing Conservation

Operationalize/Monetize – Industrial Conservation

- Contracting
 - You will need to work with your attorney to create a contract between you and the facility/business.
 - This contract will outline your rights and responsibilities, hourly and/or day rate for noise analyses, engineering consultation/support, employee testing/audiologic review, follow-up testing, and reporting/documentation.
 - Fees for supply of appropriate ear protection, including earmold impressions, when warranted.
 - What that contract includes will be influenced by the scope and breadth of your offerings.

Hearing Conservation

Operationalize/Monetize – Industrial Conservation

- Scheduling
 - The following will need to be assessed:
 - The workplace itself, on each employment shift.
 - Pre-employment.
 - Prior to the individual's first work day in a noise hazard job or work area.
 - Annually as long as the employee is assigned to a noise hazard job or work area (a time-weighted average exposure level equal to or greater than 85 dBA).
 - When the individual is moved out of an assignment in a noise hazard job or work area.
 - Additional audiology offerings:
 - Fitting and orientation of appropriate ear protection.
 - Education and training.

Hearing Conservation

Operationalize/Monetize – Industrial Conservation

- Case history
 - Last date and time of noise exposure.
 - History of use and availability of appropriate ear protection.
 - Otologic history.
 - Documentation of current medications.
 - History of drug, tobacco, alcohol and marijuana use.
 - History of occupational and recreational noise exposure.
- Special Equipment Considerations
 - Sound-level meter.
 - Mobile test capacity.
 - Mobile testing van or truck.
 - Portable audiometric test equipment.
 - High-frequency audiometer.
 - Otoacoustic emissions.

Hearing Conservation

Operationalize/Monetize – Industrial Conservation

- Testing
 - Audiologic
 - Pure-tone, air-conduction threshold testing (92552)
 - Comprehensive audiogram (92557)
 - High-frequency audiometry (92700)
 - Otoacoustic emissions (92587 or 92588)

Hearing Conservation

Operationalize/Monetize – Occupational Conservation

- Who is this program appropriate for:
 - Individuals who are exposed to consistent or intermittent, loud (exceeds 85dB) noise.
 - These occupational settings need to be monitored for their noise exposure levels.
- Scheduling
 - The following will need to be assessed:
 - The workplace itself during noisy situations.
 - Pre-employment.
 - Annual audiometric screenings or examinations (if a hearing loss is denoted).
 - When the individual is moved out of an assignment in a noise hazard job or work area.
 - Additional audiology offerings:
 - Fitting and orientation of appropriate ear protection.
 - Education and training.

Hearing Conservation

Operationalize/Monetize – Occupational Conservation

- Case history
 - History of use and availability of appropriate ear protection.
 - Otologic history.
 - Documentation of current medications.
 - History of drug, tobacco, alcohol and marijuana use.
 - History of occupational and recreational noise exposure.
- Special Equipment Considerations
 - Sound-level meter/application.
 - <https://www.cdc.gov/niosh/topics/noise/app.html>
 - Portable audiometric test equipment.
 - High-frequency audiometer.
 - Otoacoustic emissions.

Hearing Conservation

Operationalize/Monetize – Occupational Conservation

- Testing
 - Audiologic
 - [Hearing Handicap Inventory](#)
 - Pure-tone, air-conduction threshold testing (92552)
 - Comprehensive audiogram (92557)
 - High-frequency audiometry (92700)
 - Otoacoustic emissions (92587 or 92588)

Hearing Conservation

Operationalize/Monetize – Music Industry Conservation

- Who is this program appropriate for:
 - Individuals who are exposed to intermittent, loud (exceeds 85dB) noise
 - These settings need to be monitored for their noise exposure levels.
- Scheduling
 - The following will need to be assessed:
 - The setting itself during noisy situations.
 - Pre-employment/enrollment in a music program.
 - Annual audiometric screenings or examinations (if a hearing loss is denoted).
 - When the individual terminates engagement in noisy. Loud settings/environments or withdraws from the program.
 - Additional audiology offerings:
 - Fitting and orientation of appropriate ear protection.
 - Education and training.

Hearing Conservation

Operationalize/Monetize – Music Industry Conservation

- Contracting (potential need for long term management program engagement)
 - You will need to work with your attorney to create a contract between you and the school system, venue, festival, business or facility.
 - This contract will outline your rights and responsibilities, hourly and/or day rate for noise analyses, engineering consultation/support, testing/audiologic review, follow-up testing, and reporting/documentation.
 - Fees for supply of appropriate ear protection, including earmold impressions, when warranted.
 - What that contract includes will be influenced by the scope and breadth of your offerings.

Hearing Conservation

Operationalize/Monetize – Music Industry Conservation

- Case history
 - History of use and availability of appropriate ear protection.
 - Otologic history.
 - Documentation of current medications.
 - History of drug, tobacco, alcohol and marijuana use.
 - History of occupational and recreational noise exposure.
- Special Equipment Considerations
 - Sound-level meter/application.
 - <https://www.cdc.gov/niosh/topics/noise/app.html>
 - Portable audiometric test equipment.
 - High-frequency audiometer.
 - Otoacoustic emissions.

Hearing Conservation

Operationalize/Monetize – Music Industry Conservation

- Testing
 - Audiologic
 - [Hearing Handicap Inventory](#)
 - Pure-tone, air-conduction threshold testing (92552)
 - Comprehensive audiogram (92557)
 - High-frequency audiometry (92700)
 - Otoacoustic emissions (92587 or 92588)

Hearing Conservation

Operationalize/Monetize – Recreational Firearm Conservation

- Who is this program appropriate for:
 - Individuals who are exposed to intermittent, loud (exceeds 85dB) noise from gunfire.
 - These settings need to be monitored for their noise exposure levels.
 - This includes hunters, gun enthusiasts and shooting range staff.
- Scheduling
 - The following will need to be assessed:
 - The indoor facility itself during range hours.
 - Pre-firearm use/engagement in this activity.
 - Annual audiometric screenings or examinations (if a hearing loss is denoted).
 - Additional audiology offerings:
 - Fitting and orientation of appropriate ear protection.
 - Education and training.

Hearing Conservation

Operationalize/Monetize – Recreational Firearm Conservation

- Contracting (potential need for long-term management program engagement)
 - You will need to work with your attorney to create a contract between you and the indoor range or facility.
 - This contract will outline your rights and responsibilities, hourly and/or day rate for noise, analyses, engineering consultation/support, employee testing/audiologic review, follow-up testing, and reporting/documentation.
 - Fees for supply of appropriate ear protection, including earmold impressions, when warranted.
 - What that contract includes will be influenced by the scope and breadth of your offerings.

Hearing Conservation

Operationalize/Monetize – Recreational Firearm Conservation

- Case history
 - History of use and availability of appropriate ear protection.
 - Otologic history.
 - Documentation of current medications.
 - History of drug, tobacco, alcohol and marijuana use.
 - History of occupational and recreational noise exposure.
- Special Equipment Considerations
 - Sound-level meter/application.
 - <https://www.cdc.gov/niosh/topics/noise/app.html>
 - Portable audiometric test equipment.
 - High-frequency audiometer.
 - Otoacoustic emissions.

Hearing Conservation

Operationalize/Monetize – Recreational Firearm Conservation

- Testing
 - Audiologic
 - Pure-tone, air-conduction threshold testing (92552)
 - Comprehensive audiogram (92557)
 - High-frequency audiometry (92700)
 - Otoacoustic emissions (92587 or 92588)

Hearing Conservation

Operationalize/Monetize – Recreational Sport, Leisure, and Household Conservation

- Who is this program appropriate for:
 - Individuals who are exposed to intermittent, loud (exceeds 85dB) noise from motorcycling, automobile, all-terrain vehicles, airplanes, helicopters, lawn and home maintenance equipment, alarms, and sporting events.
- Scheduling
 - The following will need to be assessed:
 - Baseline audiometric testing before actively engaging in this activity or as part of routine healthcare assessments.
 - Annual audiometric screenings or examinations (if a hearing loss is denoted).
 - Additional audiology offerings:
 - Fitting and orientation of appropriate ear protection.
 - Education and training..

Hearing Conservation

Operationalize/Monetize – Recreational Sport, Leisure, and Household Conservation

- Case history
 - History of use and availability of appropriate ear protection.
 - Otologic history.
 - Documentation of current medications.
 - History of drug, tobacco, alcohol and marijuana use.
 - History of occupational and recreational noise exposure.
- Special Equipment Considerations
 - Sound-level meter/application.
 - <https://www.cdc.gov/niosh/topics/noise/app.html>
 - Portable audiometric test equipment.
 - High-frequency audiometer.
 - Otoacoustic emissions.

Hearing Conservation

Operationalize/Monetize – Recreational Sport, Leisure, and Household Conservation

- Testing
 - Audiologic
 - Pure-tone, air-conduction threshold testing (92552)
 - Comprehensive audiogram (92557)
 - High-frequency audiometry (92700)
 - Otoacoustic emissions (92587 or 92588)

Every items or service is not covered by insurance!

Significant private pay components exist!



Marketing

Key Considerations

- Website.
- Office communications.
- Physician outreach and marketing materials.
- Outreach to other healthcare professionals
 - Audiologists.
 - Hearing instrument dispensers.
 - Speech pathologists.
 - Physical therapists.
 - Occupational therapists.

Marketing

Key Considerations

- Community outreach.
 - Engage, engage, and engage some more.
 - Volunteer and join!
- Social media.
 - Become the expert.

Marketing

Key Considerations

- Care coordination and communication.

Thank you for Attending!

Questions?

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