IEPs? Not Just for School-Based Audiologists

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40 Audiology Fee Schedules: What We Can Learn from the Medicare Database The purpose of this article is not to suggest a standard set of fees for audiology practices. Just the opposite. All clinics have unique financial needs such as different rent, overhead, and salaries. The importance is understanding these differences and accounting for them.

By Barry A. Freeman and Ian M. Windmill
The American Academy of Audiology publishes Audiology Today (AT) as a means of communicating information among its members about all aspects of audiology and related topics.

AT provides comprehensive reporting on topics relevant to audiology, including clinical activities and hearing research, current events, news items, professional issues, individual-institutional-organizational announcements, and other areas within the scope of practice of audiology.

Send article ideas, submissions, questions, and concerns to Erin C. Schafer, editor-in-chief, at dr.erinschafer@gmail.com.

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Suzanne Chanesman

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The Industry Innovations Summit, presented by AudiologyOnline and sponsored by CareCredit, is an exciting new month-long event coming this March! The Industry Innovations Summit will include live webinars, a tech roundtable, and more.

- Get the inside scoop on new products + the latest hearing care technology
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*Digital swag bags will be delivered via email by 3/1/21.
The American Academy of Audiology promotes quality hearing and balance care by advancing the profession of audiology through leadership, advocacy, education, public awareness, and support of research.

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New Considerations for Recommending a Cochlear Implant Evaluation

New information for guiding your patients along their hearing journey.

Every patient’s hearing loss journey is unique, and each patient may require a different treatment option. The continuum of care for hearing loss isn’t a linear pathway so being aware of all technologies to manage your patient’s hearing loss can help you find the best solution for them. Hearing loss is seen by many to be a communication disorder, it is now known to have much wider-ranging consequences that can significantly impact a person’s quality of life. Age-related hearing loss has been shown to also lead to increased accidental falls, hospitalizations, loneliness, anxiety and social isolation.1 A multi-faceted approach to the treatment of hearing for patients is needed from a collaborative network of providers to meet the needs of your patients.

Innovations in hearing health care have made the way for over-the-counter (OTC) hearing devices and personal sound-amplification products (PSAPs) enabling patients access outside of the traditional clinical practice. However, hearing care providers are the best professionals to speak to the different hearing solutions for their patients. As a hearing care provider, you have the unique ability to differentiate your practice by counseling on all hearing loss treatment options and providing comprehensive services to support optimal performance.

If hearing aid technology is not providing your patient the ability to hear and understand speech, a cochlear implant may be the next step. Traditionally, cochlear implants have been considered a treatment option as a last resort and only for those who have lost all of their hearing. Health benefits and improved hearing outcomes2 support the need to shorten the duration of hearing loss and consider cochlear implantation before hearing loss progresses to profound. For patients with hearing losses greater than or equal to 60 dB HL (pure tone average 0.5, 1k, 2 kHz) and speech understanding less than or equal to 60%,3 referral for a cochlear implant evaluation should be pursued.

When to Consider a Cochlear Implant Evaluation for Adults*

<table>
<thead>
<tr>
<th>Audibility</th>
<th>Speech Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Tone Average (0.5, 1k, 2 kHz)</td>
<td>Unaided Word Recognition Score</td>
</tr>
<tr>
<td>GREATER THAN OR EQUAL TO 60dB³</td>
<td>LESS THAN OR EQUAL TO 60%³</td>
</tr>
</tbody>
</table>

Many adult cochlear implant users continue to wear a hearing aid on their non-implanted ear, commonly referred to as bimodal hearing. A bimodal configuration can provide your patients a richer and more natural hearing experience.4 If you recognize there is an opportunity to treat patients bimodally, there is value offered in patient experience and an opportunity to expand business. Offering cochlear implants can not only expand your business but can be a differentiator. Cochlear implant manufacturers can provide reimbursement information about their technology when billing for services like evaluations, programming and follow-up care.

The Cochlear Provider Network (CPN) enables independent dispensing audiology/ENT practices to expand their services to include cochlear implants and become part of a medical network that helps people with hearing loss achieve optimal outcomes.

To learn more about the Cochlear Provider Network visit www.cochlear.us/aaa

* This provides a recommendation of when an adult may be referred for a cochlear implant evaluation, but does not guarantee candidacy based on indications. For the approved Cochlear Nucleus Indications, please refer to the important information booklet or physician’s guides.


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Professional Plasticity

The incredible power of neuroplasticity and changes that occur in brain pathways due to auditory stimulation and life experience is fascinating, as are the changes in neural pathways and brain processing with decreased auditory input after one sustains a decrement in auditory peripheral function.

According to Wikipedia, neuroplasticity “is the ability of neural networks in the brain to change through growth and reorganization. These changes range from individual neurons making new connections to systematic adjustments like cortical remapping.”

Neuroplasticity is highly individual—some people may adapt readily to new stimuli, while others do not. Driving neuroplastic change can require intensive practice, leading researchers to explore facilitation of neural pathway reorganization through targeted rehabilitation or pharmaceutical intervention.

I often think of clinical practice and our profession as intricate neural networks and seek ways to drive what I will term “professional plasticity.” Professional plasticity could be defined as the ability of professional skills, practices, and perspectives to change through increased knowledge and experience leading to growth and reorganization of professional philosophy and implementation.

For some advances, change is easy. Consider transitioning from monitored live-voice to use of recorded-speech stimuli. This change does not take much effort, possibly akin to the concept in neuroplasticity of “individual neurons making new connections.” However, other advances are more intimidating to embrace and require greater effort to remap.

Telehealth has been an option in health care for many years, with limited implementation. Why has there been reduced professional plasticity for
embracing telehealth? One reason cited has been provider reluctance.

Britannica.com defines plasticity as the “ability of certain solids to flow or change shape permanently when subjected to stresses of intermediate magnitude between those producing temporary deformation, or elastic behavior, and those causing failure of the material, or rupture.”

Before COVID-19, the professional and practice “stresses” for many were not sufficient to drive professional plasticity to embrace telehealth. However, with a global pandemic limiting the ability for audiologists to meet patient hearing and balance needs due to restrictions on in-person service delivery, the “stresses” increased almost to the point of “rupture.”

Although difficult at first, audiologists developed new protocols and procedures to deliver care remotely. Over time, and through repeated practice, these remapped implementations of professional protocols became more fluid and efficient. Increased use of remote applications to provide services more effectively and efficiently will continue to be important for patient access and cost-effective care provision post-pandemic.

My mantra throughout my career has been one of professional plasticity—I should be changing some aspects of my practice substantively every year, especially in a profession as dynamic as audiology.

In reflecting on the past few months, I recognize that my commitment to professional plasticity has often been more akin to “individual neurons making new connections” rather than a more comprehensive “cortical remapping.”

I can fall prey to “provider reluctance” when an innovative approach appears overwhelming or threatening. Fortunately, the Academy helps to facilitate professional plasticity through collaboration with excellent colleagues in our audiology community and access to the many resources we collectively develop and share.

My new mantra is to employ these facilitators to overcome reluctance more proactively in embracing innovations and more ambitiously driving professional plasticity to creatively remap before “stresses” reach the point of “rupture.”

Angela Shoup, PhD
President
American Academy of Audiology

Each of us has the opportunity to change and grow until our very last breath. Happy creating.

—M.F. Ryan
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What’s Trending!

Researchers at the University of Miami and Harvard Medical School suggest that newborn auditory brainstem response (ABR) screening results may be used as a biomarker for autism spectrum disorder. 
*Published on December 4*

According to APNews.com, audiologists have seen an uptick in visits from people who didn’t realize how much they were relying on facial cues and lipreading before the pandemic. 
*Published on November 27*

According to Fox11 LA, social distancing, which decreases the audibility of regular speech, and the addition of other background noises means people are struggling to hear, resulting in cognitive strain. 
*Published on November 19*

With the new iPhone OS, you can activate the Hearing option in your control center. Once activated, an icon will let you know when you’re listening to music in an acceptable decibel range. 
*Published on December 3*

Published on December 4
Published on November 27
Published on November 19
Published on December 3

January 13–15
Meeting
Emirates Otorhinolaryngology Audiology and Communication Disorders Congress
Dubai, UAE
emiratesrhinologyandotology.ae

January 19
Web Seminar
Clinical Education
www.eaudiology.org

January 25
Application Deadline
Research Grants in Hearing and Balance
www.audiology.org/education-research/research-grants-hearing-and-balance

February 10
Web Seminar
Advocacy
www.eaudiology.org

February 25–26
Virtual Meeting
ICAHAT 2021: International Conference on Audiology and Hearing Aid Technologies
https://panel.waset.org/conference/2021/02/buenos-aires/program

February 26–27
Virtual Meeting
National Hearing Conservation Association
www.nhca.civicaconferences.com

March 3
Public Awareness Event
World Hearing Day
www.who.int

March 4–6
Virtual Meeting
American Auditory Society Annual Scientific and Technology Conference
amauditorysoc.org/annual-conference
Individualized Education Programs? Not Just for School-Based Audiologists

BY CHERYL DECONDE JOHNSON, SUSAN DILLMUTH-MILLER, SARAH FLORENCE, KYM MEYER, AND RACHEL PARKINGTON

Most d/Deaf or hard-of-hearing students need audiological support as part of their school special-education services. To meet this need, audiologists in clinical practice are encouraged to support their student patients. To assist, this article offers guidance regarding the audiologist’s potential contributions to the individualized education program (IEP) and the experiences of non-school-based audiologists.

Overview of IEP Requirements for Audiology Services

The Individuals with Disabilities Education Act (IDEA, 2004) contains procedural requirements for assessment, eligibility determination, and the development of services and supports for student IEPs. These services, including audiological assessment, are provided to children at no charge under the IDEA requirement for a
Audiologists from private and public non-school-based practice settings describe their experiences supporting students in their education settings, including participation in assessments and providing IEP services to ensure audiological, communication access, and educational needs are met.

TABLE 1 describes the required information that pertains to IEP development and suggested contributions of audiologists. 

Non-school-based audiologists often seek ways to ensure that their patients are receiving the school support they need, especially for monitoring their personal hearing instruments and the use of remote microphone (RM) hearing assistive technology (HAT). Adequate support is more difficult to achieve when an

free and appropriate public education (FAPE). However, non-school-based audiologists frequently perform audiological assessments that are billed to insurance or Medicaid. Participation in the remaining steps of the IEP process can be challenging unless audiologists understand special-education eligibility procedures and the way they contribute to supporting their patients’ needs.
eductional audiologist is not working in the schools.

Non-school-based audiologists may consider contracting with schools to provide these services. The Educational Audiology Association’s Guidelines for Developing Contracts for School-Based Audiology Services (EAA, 2018) is useful for this purpose.

In the discussion that follows, four audiologists from private and public non-school-based practice settings describe their experiences supporting students in their education settings, including participating and providing IEP services to ensure audiological, communication access, and educational needs are met.

Rachel Parkington
HEAR TO LEARN, NH

The IEP team looks to me, as a privately contracted provider providing in-person services, to provide information and guide decisions that may be related to eligibility, services, and accommodations.

<table>
<thead>
<tr>
<th>TABLE 1. The audiologist’s contributions to required individualized education plan (IEP) development.</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Educational Audiology Handbook, 3rd edition, by Johnson, CD and Seaton, JB. Copyright 2021 Plural Publishing Inc. All rights reserved. Used with permission.</td>
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<table>
<thead>
<tr>
<th>PART 1. DEVELOPMENT, REVIEW, AND REVISION OF THE INDIVIDUALIZED EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED INFORMATION</td>
</tr>
</tbody>
</table>

Strengths of the child

Parental concerns for enhancing their child’s education

Results of the initial or most recent evaluation

Academic, developmental, and functional needs

Consider special factors:
A. Child’s language and communication needs
B. Opportunities for direct communications with peers/professionals in the child’s language/communication mode, academic level, and full range of needs
C. Direct instruction in the child’s language/communication mode
D. Assistive technology devices and services

<table>
<thead>
<tr>
<th>PART 2. COMPONENTS OF THE IEP (34 CFR §300.320)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED INFORMATION</td>
</tr>
</tbody>
</table>

Statement of present levels of academic achievement and functional performance

Statement of measurable annual goals, including academic and functional goals

Description of measurements to document annual goal progress and frequency of progress reports

Statement of special education and related services and supplementary aids and services to be provided to child

Statement of program modifications or supports for school personnel to enable child to attain annual goals, make progress in the general education curriculum, and be educated and participate with other children with/without disabilities

Statement of individual accommodations necessary to measure the academic achievement and functional performance on state and districtwide assessments

Projected date to begin services and modifications and anticipated frequency, location, and duration of services and modifications

For transition students (16+ yrs), appropriate measurable post-secondary goals related to training, education, employment, independent-living skills, and the transition services needed to assist in reaching those goals
### PLAN (IEP) [34 CFR §300.324]

**AUDIOLOGIST’S CONTRIBUTION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe communication skills and ability to accommodate the hearing condition, self-advocacy skills, etc.</td>
<td></td>
</tr>
<tr>
<td>Describe concerns parents shared through the assessment process.</td>
<td></td>
</tr>
<tr>
<td>Describe audiological and functional assessment data regarding hearing condition, listening performance, use of hearing and/or other technology, and classroom acoustics.</td>
<td></td>
</tr>
<tr>
<td>Describe services and accommodations needed to address impact of the hearing condition or auditory-processing deficit (APD) on academic performance, communication skills, social/emotional wellness, hearing condition acceptance, self-advocacy, management of personal/assistive amplification, knowledge of hearing condition/APD, and use of accommodations.</td>
<td></td>
</tr>
<tr>
<td>Address language and communication needs relative to communication and learning abilities in various classroom situations, and the need for accommodations and services specifically addressing hearing and other assistive technology devices and accompanying services.</td>
<td></td>
</tr>
</tbody>
</table>

### AUDIOLOGIST’S CONTRIBUTION

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>Provide audiological and functional assessment data regarding the hearing condition, listening performance, use of hearing and/or other technology, and classroom acoustics.</td>
<td></td>
</tr>
<tr>
<td>Assist in writing annual goals for auditory and listening skills, use and independence with hearing technology, and self-advocacy for appropriate accommodations, etc.</td>
<td></td>
</tr>
<tr>
<td>Describe frequency of delivery of progress for parents, which can be combined with other special-education reporting.</td>
<td></td>
</tr>
<tr>
<td>Describe necessary audiology services: annual/more frequent hearing evaluations, classroom acoustic modifications, personal hearing technology/hearing assistance technology (HAT), and services including orientation and monitoring, auditory- and listening-skill development, and self-advocacy development.</td>
<td></td>
</tr>
<tr>
<td>Recommend accommodations based on assessment results and classroom listening needs; describe necessary teacher/staff support and training needed to ensure accommodations implemented.</td>
<td></td>
</tr>
<tr>
<td>Report accommodations needed to enable student to participate in assessments (e.g., accommodations, hearing technology).</td>
<td></td>
</tr>
<tr>
<td>Report service-delivery data; consider short-term and long-term services based on student needs.</td>
<td></td>
</tr>
<tr>
<td>Report information to assist student in developing goals based on access needs, knowledge of rights, and services through Americans with Disabilities Act and other agencies; provide community linkages necessary to continue hearing- or processing-related services once the student graduates.</td>
<td></td>
</tr>
</tbody>
</table>

When asked to provide input regarding assessments for students, it is my responsibility to recommend tests that will provide insight into the student’s hearing or auditory-processing deficit (APD) and functional or self-advocacy assessments that affect the student’s school performance and service needs.

To do this effectively, I must keep current on available assessments that would be best for each individual student. When invited to an eligibility-determination meeting, I interpret my assessments and those completed by the clinical audiologist.

The school staff often ask questions such as “how would you describe this hearing loss,” “how does this hearing loss impact the student’s education,” “should we categorize this student as d/Deaf, hearing impaired, or d/Deaf/blind?”

I assist summarizing the hearing loss/APD, educational impact, evaluations, accommodations, and develop self-advocacy goals. Many meetings during the 2020–2021 school year are being held remotely. This allows me to schedule and attend meetings that I may not have been able to attend if held in...
person. I have seen the benefit of having all team members present, whether face-to-face or on Zoom, as we each bring specific expertise regarding student-access supports.

As a contract provider, the biggest challenge for me is inclusion in the planning and meetings. This occurs even when the student’s primary diagnosis is hearing impairment and I am an established member of the team. I often hear “we forgot” or “we did not think it was necessary.” When you are not an employee of the school district, or if the team is large, it is common to be overlooked.

If I am not able to give input to the team, the hearing evaluations may be summarized incorrectly or may not be mentioned in the student’s eligibility forms and IEP document. Without my guidance, educational audiology service hours often are not written into the service grid.

Occasionally, I am told by staff members that, if they add my services, they are not sure how the district will respond. I have also been told that my services are unnecessary in the IEP and the schools do not want to spend additional funds. In these cases, it is always helpful to have information about the role of the educational audiologist (EAA, 2018; 2019), the National Association of State Directors of Special Education Guidelines (2018), pertinent IDEA regulations, and any other materials to advocate for your position.

Typically, the more I can participate in IEP or other team meetings, the more the teachers and school administrators understand and value my services, which generally leads to a contract for my time.

Sarah Florence  
DOTCOM THERAPY, CO

As an audiologist contracted to provide services remotely, I am involved in all functions of the IEP team including evaluation, eligibility determination, and the development of the IEP. Because excellent communication between on-site school personnel and a remote audiologist is critical, my participation in the IEP meeting and development process is generally smooth.

When services are provided in a fully remote state, I coordinate and schedule audiological evaluations at a local clinic or obtain copies of results from the student’s personal audiologist. Additional information may be obtained from
the student’s classroom teachers via questionnaires or inventories.

Upon receipt of records, and through collaboration with a teacher of d/Deaf or hard of hearing students, eligibility can be determined and recommendations can be made for appropriate accommodations. Depending on the individual school district, I may have direct access to edit the IEP draft but, commonly, I work with the case manager to insert my contributions.

Many districts that are using fully remote educational audiology services are either rural or districts with few students with reduced hearing. In these cases, the biggest challenge with the IEP team stems from their unfamiliarity with special-education eligibility for students who are d/Deaf or hard of hearing.

In these circumstances, my role may be more like that of an advocate. It is important to recognize the balance between representing the needs of the student while also helping school personnel understand your role on their team.

Historically, attending IEP meetings remotely was challenging, often because the meeting participants would forget to include my input. However, under COVID-19 restrictions, remote-meeting attendance has become expected and increasingly welcomed. As a result of increased participation, providers are present to discuss their findings and recommendations in a more collaborative manner.

Kym Meyer
THE LEARNING CENTER FOR THE DEAF
FRAMINGHAM, MA

Prior to the development of Public School Partnerships (PSP) at The Learning Center for the Deaf in 2002, educational audiology did not systematically exist in our state outside of two major cities, each of which had one educational audiologist.

Previously, hospitals did hearing tests and the school-based speech-language pathologist interpreted them. Audiologists were not involved in the IEP process. Once PSP offered contract educational audiology services, our increasingly growing team of educational audiologists provided in-district support to students who are d/Deaf or hard of hearing and who are educated within their home school districts.

Hospital settings still provide clinical hearing and auditory-processing diagnoses to the school district. Our contracted educational audiologist interprets for the IEP team how this information relates to auditory access to the
Individualized Education Programs? Not Just for School-Based Audiologists

In addition, the contracted educational audiologist observes the student in the classroom and identifies other tools to evaluate the child’s access to the curriculum and inform IEP goals and services (e.g., teacher and student questionnaires).

These tools can help inform the IEP goal development, accommodations needed, and service delivery. The educational audiologist may be “put on the grid” (special-education “speak” for adding the audiologist to the service-delivery team) to provide ongoing consultation to the IEP team or even regular observations of the student in classes to help teachers implement classroom accommodations.

Educational audiologists partner with teachers of students who are d/Deaf or hard of hearing and the school’s speech-language pathologist. The educational audiologist’s training, expertise, and scope of practice cover a gap that these other professionals cannot fill.

A contract-consultation model can be challenging because you are not physically present and, as a result, may not be invited to IEP meetings or consulted when new students who are d/Deaf or hard of hearing move to the district. Our educational audiologists check in with the administrators and their school-based contacts to ensure we are meeting student needs and preventing students from falling through the cracks.

Susan Dillmuth-Miller
EAST STROUDSBURG UNIVERSITY, PA

As a clinical audiologist in a rural communication and sciences disorders (CSD) program, my role in IEP development varies across school districts and has changed over time. At first, not all districts had access to an educational audiologist, so I was contracted directly by the districts.

As school districts gained access to educational audiologists, I continued consultation for children in unique circumstances, including children needing access to transportation to the school-based educational audiologist, those enrolled in private schools, students from other counties without an educational audiologist, and those needing assessment for APD and/or treatment. The parents typically determine my level of involvement with the IEP.

Many of my consultations involve children with APD. Parents seek my services for
evaluation and treatment. I see children who have APD, but are not necessarily eligible for speech and language services through the school. I assess for eligibility determinations, functional assessments, and explanations of how the APD interacts with listening in the classroom, academics, and auditory comprehension.

The graduate speech-language pathology students under my supervision play a role in relating functional performance to their assessments and provide in-service training to school staff. Students are seen in our clinic for auditory-skills treatment, often a service not provided in the schools.

This intervention is provided by supervised university graduate students. Parents share my reports and progress reports with the school case manager, give me permission to discuss them with the school team, or invite me to the IEP meetings.

As a consultant, I am an outsider to the school and my involvement is overlooked, unless parents advocate for my presence. Another challenge is a heavy teaching schedule during school hours, limiting my availability for IEP meetings. Our evaluations provide important information to the IEP and often prompt the team to agree to a consultation with the school-based educational audiologist.

Sarah Florence, AuD, provides remote educational audiology services to school districts from her home in Colorado. She also works with DotCom Therapy to develop a remote educational audiology service model and improve access to special services in rural and urban areas.

Kym Meyer, PhD, created Public School Partnerships, the first program that systematically provided educational audiology services in Massachusetts public schools. She has a master’s degree in audiology from Gallaudet University and recently defended her PhD in special education at UMASS-Amherst.

Rachel Parkington, AuD, is the owner of Hear to Learn, LLC, a private practice that provides support for students with hearing loss and auditory needs across New Hampshire.

References


Remote Learning During the Pandemic for Children with Hearing Loss
INTRODUCTION

Many students with hearing loss receive instructional accommodations, curricular modifications, and school-related hearing technology as outlined in their Section 504 or individualized education plans (IEPs). Historically, however, these plans did not account for a student’s online learning needs. As a result, school personnel are struggling to ensure equal access to education across varied learning environments during the pandemic for students with hearing loss.

Safety measures intended to reduce COVID-19 transmission inadvertently created new educational challenges for students with hearing loss. Some examples include the loss of visual cues and auditory-signal attenuation from face masks, reduced access to sign language interpreters, and lack of captioning or transcripts for online lectures or meetings (American Speech-Language-Hearing Association, 2020; Goldin, Weinstein, and Shiman, 2020; National Association of the Deaf, 2020; Rudge, Sonneveldt, and Moog Brooks, 2020; Atcherson, Finley, McDowell, and Watson, 2020).
To quantify these and other recent educational challenges, a school-based pilot study was conducted to identify the frequency of various learning situations (i.e., remote virtual, in person, blended), document the accessibility of course content and technology, and quantify hearing issues associated with safety measures and technology use. Identifying current educational challenges will enable audiologists, teachers of students who are d/Deaf or hard of hearing, and other school personnel to improve educational access, learning, and engagement for students with hearing loss.

**SURVEY METHODS**

The targeted survey respondents were school personnel who teach and work with school-aged students with hearing loss. Key issues informing survey statements were identified from existing publications and articles (e.g., American Speech-Language-Hearing Association, 2020; National Association of the Deaf, 2020; Wolfe et al, 2020), the Educational Audiology Association (EAA) Listserv, and social media groups focused on pediatric audiology.

A draft of the online survey was created in Qualtrics XM (2005), sent to two pediatric and four educational audiologists for review, and subsequently revised based on feedback.

The online survey was distributed nationally in September 2020 via social media platforms, email communication, and the EAA Listserv. The results that follow include data collected within three weeks of survey distribution and focus primarily on the experiences reported by respondents working with elementary-school-age students (Kindergarten through grades 5 and 6).

Survey response numbers (N) vary because they are based on the total responses for each question. In this article, the survey results are followed by a brief discussion of strategies to mitigate the most common issues encountered by the students represented in this study.

**RESULTS**

**General Respondent Information**

Respondents (N=202) included educational audiologists (42 percent of respondents), teachers of students who are d/Deaf or hard of hearing (36 percent), special education teachers (five percent), school-based speech-language pathologists (four percent), general education teachers (two percent), and other school personnel (10 percent). Some individuals were dual certified and most respondents (78 percent) served elementary-school students.

The responses (N=192) indicated that, since the beginning of this academic year, only about five percent of respondents’ (N=10) schools were offering fully in-person learning. Fully remote learning was reported in 27 percent of schools and 68 percent of schools used blended learning including both remote and in-person situations.

**Categories of Remote Learning**

FIGURE 1 displays the percentage of time students with hearing loss engage in asynchronous (pre-recorded) and synchronous (live) remote learning. Asynchronous refers to pre-recorded, teacher-led lectures or lessons that are uploaded onto the student’s online learning platform (e.g., Schoology, Google Classroom, Canvas, etc.). Synchronous represents live, teacher-led lectures or lessons presented via Zoom, Google Meet, Teams, Webex, etc.
There were a total of 131 responses to this question. Respondents selected not applicable (NA) if they did not know the answer or if a question did not apply to their students.

Overall, 83 percent of respondents to a question specific to elementary-school students reported that their schools offer synchronous learning opportunities and 60 percent of respondents to the question reported that their schools offer asynchronous learning opportunities. It should be noted, however, that more missing data (NA) was observed for asynchronous learning.

According to the study results, roughly half of students (55.7 percent asynchronous, 56.5 percent synchronous) engage in one to five learning sessions per week for both formats, but higher session frequencies (10+) are more commonly delivered through the synchronous (26 percent) versus the asynchronous (four percent) format. In general, based on the available data, synchronous sessions are offered more frequently.

The left side of FIGURE 2 illustrates the responses (N=124) to a question about the approximate percentage of elementary students who have online group meetings (N=124) and delineates group-meeting frequency. The majority (85 percent) of students participate in online group

**FIGURE 1.** Approximate percentage of time students with hearing loss participate in asynchronous (pre-recorded) and synchronous (live) remote learning.
Remote Learning During the Pandemic for Children with Hearing Loss

sessions at least once a week, with 30 percent participating two to three times per day. More than half of online group meetings include less than 15 students (53 percent) and nearly one quarter involve small groups of one to four students (24 percent).

Larger online group meetings of 16 or more students made up an additional 22 percent of reported sessions. The responses indicate that these meetings typically involve multiple speakers and varying group sizes.

The right side of FIGURE 2 shows the proportion of time elementary-school students are asked to review videos or lessons from online sources such as YouTube. There were a total of 118 responses to this question. More than three-quarters of students (80.5 percent) represented in this survey use outside sources for learning and nearly 20 percent (19.5 percent) use outside sources between one to three times per day.

For each learning situation included in FIGURES 1 and 2, additional questions were asked to assess the accommodations provided to elementary students and the types of face masks worn (TABLE 1). Across all learning situations (i.e., asynchronous, synchronous, group meetings), closed captioning or transcripts were most frequently reported as being provided some of the time. The
responses included: synchronous closed captioning reported at 41.5 percent, synchronous transcripts at 31.5 percent, asynchronous closed captioning at 40.5 percent, and asynchronous transcripts at 28.7 percent.

The results indicated that recordings of lectures and meetings are consistently provided in a minority of cases for teacher-led (25 percent) and group meetings (16 percent). During synchronous, teacher-led lessons, some teachers wear transparent masks and others wear non-transparent masks that limit the use of visual cues. In online group meetings, most students are not wearing masks and very few wear transparent masks. Finally, across the learning situations, interpreters are provided to most students who normally have an interpreter at school (TABLE 1).

The Technology

The most frequently dispensed technology for home use included remote-microphone systems, laptop computers, and technology-associated chargers.

The types of technology and accessories used at home by school-age students with hearing

<table>
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<th>TABLE 1. Percentage of time that specific accommodations were provided and types of masks used in various learning situations.</th>
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<td><strong>ASYNCHRONOUS, PRE-RECORDED LESSONS:</strong> Teacher Led</td>
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<td><strong>SYNCHRONOUS, LIVE LESSONS:</strong> Teacher Led</td>
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<td><strong>GROUP MEETINGS</strong></td>
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<td><strong>ONLINE VIDEOS/LESSONS</strong></td>
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</table>

A blank cell indicates that a question was not asked for that learning situation. N=number of responses. NA=not applicable. NA indicates that respondents did not know the answer to a question or a question did not apply to elementary students. Some=sometimes.
loss appear below, in order of most to least often reported by respondents:

- Remote microphone streaming accessories for hearing aids or cochlear implants (N=61)
- Headphones (N=58)
- Splitters to allow for multiple audio inputs or outputs (N=56)
- Hearing aids (N=48)
- Other (e.g., telecoil or Bluetooth neck loops, multimedia hubs, external speakers, television streaming devices) (N=53)

More than two-thirds of the respondents (68 percent) reported

FIGURE 3. Approximate percentage of time students and caregivers report technology issues and an assessment of caregiver comfort with the technology and software required for virtual learning.

Approximately how often do students or caregivers report technology issues with audio or video signals during live lectures, lessons, or group meetings?

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<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>15%</td>
<td>Never</td>
</tr>
<tr>
<td>11%</td>
<td>Several Times/Week</td>
</tr>
<tr>
<td>5%</td>
<td>Almost All the Time</td>
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What proportion of caregivers are comfortable with the technology and software required for virtual learning?

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<th>Percentage</th>
<th>Description</th>
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<tr>
<td>23%</td>
<td>None</td>
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<tr>
<td>31%</td>
<td>One Third</td>
</tr>
<tr>
<td>41%</td>
<td>One Half</td>
</tr>
<tr>
<td>74%</td>
<td>Almost All</td>
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Remote Learning During the Pandemic for Children with Hearing Loss

a policy change enabling students to take technology home during the pandemic. Overall, 91 percent of the respondents indicated that technology could be taken home, with only nine percent of respondents reporting no such access for students at their schools.

Repairs of school technology were handled by student caregivers who drop off equipment at the school and pick it up at a later date (34 percent), caregivers who drop off and wait for “curbside” service (27 percent), or by school personnel who pick up and drop off technology at students’ homes (20 percent). Less frequently reported were in-person repair appointments at a school facility (13 percent) and shipping equipment to and from the school, either at caregiver (two percent) or school (three percent) expense.

**DISCUSSION**

Remote learning opportunities are available to most students during the pandemic. The respondents indicated that their students spend all (27 percent) or part (68 percent) of their time learning remotely.

The focus on remote learning brings its own challenges. Eighty-five percent of students reportedly experience technology issues at least several times a week. Only five percent of respondents indicated that all of their students' families are comfortable with the technology and software (**Figure 3**).

Access issues arising from technology problems and pandemic-associated adaptations (e.g., the use of masks, virtual meetings that may lack closed captioning, etc.) may have significant implications on student understanding and increase educational risk for students with hearing loss.

The students represented in this survey participate in a variety of different learning situations (**Figures 1 and 2**). Accommodations (e.g., transcripts, captioning, etc.) were often provided only some of the time (**Table 1**). Increasing the availability and consistency of effective accommodations such as transparent masks, for example, can offer students visual cues to clarify speech and promote understanding (Rudge et al, 2020; Samuel et al, 2020; Wolfe et al, 2020).

Although many students have been provided hearing and other technologies for home use, additional family support may be needed. Seventy-seven percent of the respondents reported that fewer than half of the students' caregivers are comfortable with these technologies (**Figure 3**). Lack of caregiver confidence may compromise the use and benefit of the technologies provided, particularly in the case of elementary-aged children, where technology...
ownership, care, use, and hearing-related self-advocacy may just be beginning to emerge.

One of the limitations of this survey is the varying response rate across survey items due to the different professions and roles of respondents. Teachers were best equipped to answer educational questions, while educational audiologists were more familiar with hearing technologies, resulting in variable response rates and missing data (NA) across fields.

Data collection is still in progress and updated results with larger samples are expected to reduce the influence of missing data. In addition, future analysis will elaborate on the state of learning, accommodations, and the needs of secondary students with hearing loss and will encompass both in-person and remote pandemic-related observations.

RECOMMENDATIONS AND STRATEGIES
To address the remote-learning challenges of students with hearing loss, school personnel could consider administering a situational learning inventory for each student. This may help identify situation-specific needs and solutions to ensure equal access across the varied instructional settings for children during the pandemic.

Currently, children are highly dependent on virtual-learning platforms, but their caregivers’ baseline competence with technology and confidence troubleshooting technology issues may be limited. Student check-ins and family-directed resources (e.g., troubleshooting guides) may help address technology issues hindering access. An individualized approach to identifying student and caregiver needs can help ensure that students with hearing loss receive equal access to education across learning environments, even during these unprecedented times.

Recommendations for improving access to speech have been discussed by others (e.g., American Speech-Language-Hearing Association, 2020; Educational Audiology Association, 2020; Wolfe et al, 2020). Examples of adaptations include the use of clear face shields/masks; providing transcripts, notes, and closed captioning; and using remote-microphone or classroom audio-distribution systems for in-person learning.

Effectively serving students with hearing loss during the pandemic is challenging. The swift adaptation of support can promote access to the curriculum across varied learning environments.

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Alexandra Lavi is a second-year AuD student at the University of North Texas in Denton, Texas. She enjoys collaborating on research projects and is excited about her future career as a clinical audiologist.

References
Remote Learning During the Pandemic for Children with Hearing Loss


REGISTRATION OPENS FEBRUARY 2021

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WHEN AUDIOLOGY STUDENTS ENCOUNTER BIGOTRY FROM PATIENTS

PRECEPTORS MUST BECOME ALLIES
A few years ago, a young physician reported the following experience:

_During my internal medicine rotation... a patient called me a “colored girl” three times in front of the attending physician. The doctor did not correct the patient, nor did she address the incident with me privately. Despite all the other positive interactions I had with this teacher, her silence in this circumstance diminished my presence. I wondered if she thought of me as a “colored girl,” too (Okwerekwu, 2016)._

This physician’s encounter with a prejudiced patient is all too common in the United States, as was her supervisor’s inaction (Garan and Rasmussan, 2019).

Health-care trainees only fairly recently began to report being demeaned by patients for their race, ethnicity, gender, sexual orientation, or religion (Grady and White, 2020; Tedeschi, 2017). A systematic review of harassment...
When AuD Students Encounter Bigotry From Patients, Preceptors Must Become Allies

during medical school, for example, found that 35 percent of trainees had been the object of patients’ discriminatory verbal abuse (Fnais et al, 2014).

The response to patient bias requires an urgent call for action.

Historically, there has been little attempt to prepare trainees for biased patients, leaving both trainee and preceptor caught off guard and ill-equipped to respond effectively (Wheeler et al, 2019). Consequently, when trainees experience racial and other biases from patients, they frequently report not knowing how to respond and also doubt that their superiors would act upon the complaint (Morrison et al, 2019; Paul-Emile et al, 2020).

The trainees also report fearing faculty repercussions and being perceived as unprofessional or “playing the race/ethnicity card” and, having little trust in their situation, ultimately worry about jeopardizing their evaluations (Osseo-Asare et al, 2018; Wheeler et al, 2019).

A preceptor’s inaction might be understandable. Although most medical centers have policies on how to work with challenging patients, most lack policies addressing patients’ expressed bias against their clinicians (Paul-Emile et al, 2020). Regarding this lack of preparation, Whitgob et al (2016) conclude: “[T]o our knowledge, the literature offers no recommendations for how to respond.”

In this current and momentous era of the Black Lives Matter movement, the response to patient bias requires an urgent call for action. Because of students’ vulnerable status, our first-order question within audiology must be: How do AuD preceptors respond when patient bias is directed at students?

Per American Academy of Audiology Past President Catherine Palmer’s (2020) vision of an inclusive profession, in a very real sense, preceptors are positioned as inherent front-line allies by virtue of their direct responsibility for student safety and welfare, as well as training.

The goals of this article are to (1) review the long-term impact of patient bias, (2) introduce the concept of duty of care, and (3) offer
When AuD Students Encounter Bigotry From Patients, Preceptors Must Become Allies

our recommendations for ways to respond as student allies if and when patient bias presents. Our focus here is on students of color, although this information also applies to students targeted because of their gender, sexual identity, religion, or ethnicity.

**Impact of Bias: Long-Lasting Emotional Harm**

When targeted by biased patients, health-care workers report experiencing physical and emotional exhaustion, anger, fear, self-doubt, isolation, moral distress, cynicism, emotional labor, and stress that lingers after the event (Cottingham et al, 2018). Mitchell (2019) documents the effects of repeated exposure to discrimination resulting in “a cascade of biopsychosocial sequelae...including elevated blood pressure and cortisol, increased heart rate, hypervigilance, amygdala activation, aggression, risk of depression, and increased incidence of substance use or abuse.”

In a *New York Times* article, Khullar (2017) explains in depth: “Research suggests that discrimination is internalized over a lifetime, and linked to a variety of poor health markers and outcomes: more inflammation and worse sleep; smaller babies and higher infant death rates; a greater risk of cancer, depression and substance use. The cumulative burden of discrimination is linked to higher rates of hypertension and more severe narrowing of important arteries in the heart and neck. Even the telomeres at the end of our chromosomes, which act as a sort of timer for aging cells, can shorten.”

Trainees in health care are especially vulnerable, given their lower professional status and social power. When confronting patient bias, they have reported uncertainty, confusion, and pain associated with biased patient behavior, which can understandably undermine their learning (Cottingham et al, 2018; Grady and White, 2020). Nonaction on the part of the preceptor can compound the hardship, which at the minimum could convey a lack of care and responsibility for the trainee’s well-being, or worse, could be perceived as implicit agreement with a patient’s bias (Paul-Emile et al, 2020).

Trainees may feel forsaken during patient-bias experiences, but their preceptors, as witnesses, also feel moral distress as well as deep uncertainty about how to respond (Wheeler et al, 2019). In addition to lacking skills and strategies for a response, they may not be confident of support from their own supervisors or their institution, and may doubt the value of responding at all, either in real time or in a debriefing moment.

Does the profession of audiology and its preceptors have an obligation to respond to patient bias directed to our students? Student advocates say yes, we have a profound ethical responsibility to protect students from all types of harm, also described as a duty of care (Bryden and Storey, 2011; Razack and Philibert, 2019).

**Duty of Care in Clinical Training**

The general use of the concept of duty of care refers to “a duty to use care toward others in order to protect them from unnecessary risk of harm” (Merriam-Webster Law Dictionary, 2020). The duty-of-care concept recently has been applied to a university setting, wherein a court held that “universities have a special relationship with their students and a duty to protect them from foreseeable violence during curricular activities” (Regents of California et al. v. The Superior Court of Los Angeles County, 2018).
The goal of expressed patient bias is oppression, described as a structural form of violence (Hamilton, 2020) and, while such incidents often cannot be foreseen, the statistical likelihood of occurrence is reason enough to acknowledge our duty of care in this regard. Knowing the enduring harm experienced from patient bias, preceptors have an ethical obligation to support students before, during, and after these painful moments (Garan and Rasmussen, 2019). As Paul-Emile (2019) sees it: “Preparedness is imperative because prevention is impossible.”

**How to Prepare?**

Noting the dearth of training support in this area, Paul-Emile (2019) developed an organization-wide protocol that includes the following steps: advocacy, debriefing, team meeting, tracking/data collection, and organizational culture change. However, not all of these steps apply to an audiology training site.

Additionally, we note the absence of a vital pro-active planning session to prepare for potential patient bias before trainees begin their clinical placements. As a starting point, then, we propose a smaller scale and modified protocol suitable for most audiology settings involving three steps: advance planning, real-time responses, and debriefing.

**ADVANCE PLANNING.**

Full preparedness should mean creating a response plan before an event occurs. Student clinicians have no reason to automatically trust new preceptors; working toward
trustworthiness requires candid and no doubt difficult conversations about the potential risk of patient bias, the student’s concerns, and the preceptor’s commitment to the student’s right to a safe learning environment.

Given students’ lack of power, the conversation must be initiated by the preceptor. For example: “Neither of us can predict if or when a patient will express bias against a clinician. I am responsible for your safety, so I’d like to co-create with you a response plan: for instance, how to signal to me if you want me to address it. If you want to address it, I will back you up. If it gets worse, you can walk away. I can’t promise I will be skilled or effective, but I will try. If something occurs when I am not present, I ask that you let me know as soon as possible. How would you like us to proceed?”

Among the options is the audiology student’s right to respond directly. However, we now enter uncharted territory. There is virtually no guidance on how a trainee involved with patient care might effectively manage that option.

Pean and Hart (2019) recommend using verbal de-escalation techniques, but the examples given in their reference (Richmond et al, 2012) are designed for agitated patients in emergency situations, not typical audiology settings. Input from the field is urgently needed to support this area of professional development.

**REAL-TIME RESPONSES.**

If the preceptor is present during an incident of bias, and if the student has indicated a preference for the preceptor to intervene, Warsame and Hayes (2019) suggest terminating biased comments and behaviors with firm responses such as: “Our clinic trains the best and brightest people to care for our patients, regardless of their race” or “We want to provide you with excellent care and believe our trainee is the right person to do so.”

If more directive responses are warranted, the patient should be advised that the observed biased behavior or comment is against
When AuD Students Encounter Bigotry From Patients, Preceptors Must Become Allies

institutional policies. An example of this kind of response is offered by the Mayo Clinic: “If patients’ or visitors’ behavior to staff is derogatory or abusive, it will not be tolerated and, if persistent, could result in termination of care...” (Warsame and Hayes, 2019). Needless to say, such policies must be developed, shared with patients prior to their appointment, and readily available in writing as needed.

DEBRIEFING.

Whether or not the preceptor is present during an incident, both preceptor and student must carve out time to review the situation and discuss how to respond the next time something similar occurs. Mitchell (2019) recommends using affective labeling (naming one’s emotions) as a coping strategy, because it has been well documented that discussing emotional reactions helps make sense of one’s feelings and frees the individual from being controlled by them.

Being able to “name it to tame it” can de-personalize the intended attack and validate one’s reactions as legitimate and just (Barrett et al, 2001; Creswell et al, 2007; Torre and Lieberman, 2018). The overarching goal of debriefing is to confirm with the student trainee that tolerating discrimination is never acceptable and that the preceptor is vigilant to his or her duty of care.

Now Is the Time!

There is much work to be done in this area—and it must begin now.

Patients can express bias in many ways, with overtly inappropriate language and with other actions that may be termed microaggressions, which are defined by Sue et al (2007) as “brief, everyday exchanges that send denigrating messages to people of color because
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they belong to a racial minority group.” Examples heard in health-care settings include comments on intelligence (“You are very articulate.”) or an assumption of “second-class citizenship” (Oh, I thought you were house-keeping staff.”) (Garan and Rasmussen, 2019).

Microaggressions are commonplace daily indignities (Sue et al, 2007) that many individuals experience. When these indignities are related to race, will a White preceptor be able to notice them?

Williams (2020) cautions: “Microaggressions are invisible to many White people because they are socialized not to see racial inequities...[and] as dominant group members, accurate identification is not necessary to ensure personal safety and well-being.”

Once sensitized, however, a responsive skill set must be developed beyond the suggested protocol offered here. Moving forward, whatever actions are taken, we must acknowledge that we are at a point where “quiet acceptance of biased patient behavior is not a defensible norm” (Paul-Emile et al, 2020).

Recommended Reading


References


M. Dawn Nelson, PhD, is a professor of audiology at the Central Michigan University Department of Communication Disorders in Mt. Pleasant, Michigan. Her primary professional interests are vestibular and hearing disorders and the risk of falls in individuals living with sickle cell disease.

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Kris English, PhD, is a professor emeritus at the University of Akron School of Speech-Language Pathology and Audiology in Akron, Ohio. Her specialty areas are counseling and pediatrics.

M. Dawn Nelson, PhD, is a professor of audiology at the Central Michigan University Department of Communication Disorders in Mt. Pleasant, Michigan. Her primary professional interests are vestibular and hearing disorders and the risk of falls in individuals living with sickle cell disease.
When AuD Students Encounter Bigotry From Patients, Preceptors Must Become Allies


Mitchell C. (2019) How should clinicians and trainees respond to each other and to patients whose views or behaviors are offensive? *AMA J Ethics* 21(6):E480–484.


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What We Can Learn from the Medicare Database

BY BARRY A. FREEMAN AND IAN M. WINDMILL
The purpose of this article is not to suggest a standard set of fees for audiology practices. Just the opposite. All clinics have unique financial needs such as different rent, overhead, and salaries. The importance is understanding these differences and accounting for them with revenue and pricing strategies.

Pricing Thoughts Overview

- How do you set your fees?
- How much is too much and how much is not enough?

For diagnostics, some audiologists may look at the fee schedule provided by third parties such as Medicare and wonder if those fees should be the fees for all patients. For products, audiologists may use manufacturers’ suggested retail pricing to determine how much should be charged.

Yet neither of these approaches seem to make financial sense. They are a little like asking your grandparents what they paid for a new home or a loaf of bread in 1970 and using that as a marker when shopping today.

If, for example, Medicare reimburses $39.00 for a comprehensive audiologic evaluation (current procedural terminology or CPT 92557), is that really sufficient to cover the costs associated with providing the services,
including the overhead for equipment, rent for the office space, and supplies?

In the same manner, when setting a price for hearing aids, will a set multiple such as 2–3 times the purchase price cover the costs and profit goals for a practice in Los Angeles or Manhattan in the same manner that it will in Clarksville, Tennessee, or Louisville, Kentucky?

“The single most important decision in evaluating a business is pricing power,” Warren Buffett once said (Frye and Campbell, 2011).

The literature on management is filled with approaches to setting prices (Traynor, 2019; Robinson, 2015; Bloomenthal, 2019).

COST-BASED PRICING
Cost-based pricing, for example, may be popular in some audiology clinics where products are marked up a fixed percent or multiple of the purchase price. For example, if the practice paid $500 for a hearing aid, then the price to the patient, inclusive of fitting fees and services, might be three times the purchase price, or $1,500.

The weaknesses of this approach include the question of whether the patient or a third party will pay this price. Also, one must consider whether the same or a similar product is available from the competition at a different price. This pricing approach often is established without consideration of whether it will cover expenses and meet financial goals.

COMPETITION-BASED PRICING
Competition-based pricing, another pricing strategy, may resolve one of the weaknesses of cost-based pricing by setting prices based on the prices offered by the competition. Inherent in this pricing strategy is the belief that price is one of the most important purchase criteria of our patients and, if you don’t offer a competitive price, coupons, or incentives, the patient will go elsewhere.

A weakness of this approach is that the value is placed on the price and not the quality and

<table>
<thead>
<tr>
<th>CPT CODE</th>
<th>PROCEDURE</th>
<th>AVERAGE MEDICARE ALLOWED</th>
<th>AVERAGE SUBMITTED CHARGE BY AUDIOLOGIST</th>
<th>AVERAGE MEDICARE PAYMENT</th>
<th>RANGE OF SUBMITTED CHARGE BY AUDIOLOGISTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>92557</td>
<td>Comprehensive Audiology Evaluation</td>
<td>$37.58</td>
<td>$107.58</td>
<td>$26.23</td>
<td>$22.34–$635.00</td>
</tr>
<tr>
<td>92567</td>
<td>Tympanometry</td>
<td>$14.38</td>
<td>$46.12</td>
<td>$10.21</td>
<td>$12.00–$274.00</td>
</tr>
</tbody>
</table>

TABLE 1. Example of Medicare-allowed charges, payments, and submitted charges by audiologists for two audiology diagnostic procedures.
benefits of the care offered to the patient. Also, it is not common for patients to select a provider based on the costs of their diagnostic and treatment services. People do not select their surgeons based on costs.

In the same manner, patients do not select audiologists for diagnostic evaluations based on the charges for these services. In some respects, industry has made costs relevant to consumers, particularly for those practices that focus more on products than the full scope of audiology services. This, however, places the audiology practice in the retail arena rather than the health-care arena.

CUSTOMER VALUE-BASED PRICING
A third approach to pricing is customer value-based pricing, which is based on the belief that perceived customer value is the primary factor in patient decision making. It is not about the price, but about the quality of care. Prices are driven by an understanding of patient needs and their perception of value. In this example, patients are driven by best practices and patient-centered care, rather than prices.

Your Financial Needs
Today, there is constant pressure on clinics to generate the revenue necessary to meet costs. Employees want raises in salaries, operating costs and overhead continue to increase and, all the while, third parties such as insurance companies reduce reimbursement. In addition, competition is entering the market at lower prices, which also could reduce clinic revenue.

The Medicare fee schedule is set annually and may vary greatly from the usual and customary fees set by clinics. It, therefore, is necessary to understand the importance of pricing and setting fees in a clinic environment. The purpose of this article is not to suggest a standard set of fees for audiology practices. Just the opposite. All clinics have unique financial needs such as different rent, overhead, and salaries. The importance is understanding these differences and accounting for them with revenue and pricing strategies.
Setting Prices in Today’s Health-Care Environment

- How often do you sit down and list all the services and products offered in the practice?

- How often do you consider the time it takes to deliver the services and products?

- How often do you consider the costs associated with these activities?

Hopefully, your answer is not “never” or “rarely!” Regardless of your position in a practice, it is important to consider pricing, not just for profitability, but also to understand the impact on patient services.

During the past few years, articles and presentations reviewed more than a decade of data provided by Centers for Medicare and Medicaid Services (CMS) on payments to audiologists for services provided to Medicare beneficiaries. These articles and presentations were focused on reimbursement, best clinical practices, and comorbidities of Medicare beneficiaries referred for audiology diagnostic procedures (Windmill and Freeman, 2019; Windmill et al, 2019).

The data presented was extracted directly from open-access materials available from CMS. These materials are accessible for public review and include the following:

- Allowed services


- Payments for audiology procedure codes (www.cms.gov/apps/physician-fee-schedule/license-agreement.aspx)

The authors of this article spent the past two years going through the data to share with colleagues. We understand that some of the data may result in information that is contrary to traditional teachings, but this data is based on actual CMS payment data to audiologists and not suppositions or opinions.

Any opinions offered here may not be consistent with those of the Academy or other published literature, but are based on actual data provided by CMS on the procedures of individual audiologists based on their national provider identifier (NPI) numbers and billing practices.

The CMS data includes the “Medicare allowable” or the amount Medicare authorizes for each service and the “average Medicare payments,” generally 80 percent of the allowable with the 20 percent co-pay balance due from the patient or the co-payer.

In addition, CMS publishes the “average submitted charge” for each billed procedure. That is, CMS provides the actual reimbursement paid to each audiologist in the United States and also includes the usual and customary amount the audiologist billed for each procedure.

A summary of data provided by CMS (TABLE 1) for two CPT codes (92557 and 92567) suggests pricing variability among audiologists across the U.S. For example, the “average Medicare allowed” (average amount authorized for payment to audiologists—TABLE 2) for a comprehensive audiology evaluation (92557) was...
$37.58 in 2017. This was slightly less than the average permitted payment of $37.97 based on the relative value unit (RVU) for 92557 in 2017.

Medicare agrees to pay 80 percent of the Medicare allowed amount, which, based on the $37.97 authorized amount, should have been $30.06. The patient, then, is responsible for a 20 percent co-pay. Yet, the average Medicare payment to audiologists was $26.23, or an average of $4.00 less than the 80 percent Medicare-allowed payments for covered services.

There are several possible explanations why the average payments were less than the Medicare allowable. For example, provider reimbursement varies by geographic factors. Alaska audiologists are paid approximately 31 percent more than the national average, while audiologists in Mississippi are paid seven percent less.

Similarly, audiology clinic settings can cause variations in reimbursement. “Non-facilities” (e.g., independent audiology practices, otolaryngology offices, clinics that are not part of a hospital) are reimbursed, on average, at slightly higher levels than “facilities,” which are inpatient or outpatient hospital-based facilities.

Another contributing factor to variations in reimbursement is the usual and customary fee charged by audiologists. Medicare providers are permitted to submit usual and customary charges to Medicare for services. These are fees established by audiology clinics to deliver the services to their patients. The Medicare fee schedule is set annually and may vary greatly from the usual and customary fees set by clinics.

The data in TABLE 1 reveals that the average usual and customary charge submitted by audiologists for 92557 was $107.58. However, the charges submitted to Medicare by audiologists ranged between $22.34 and $635.00 for the 92557 CPT code.

Eighty-two audiologists billed less than $38.00 to Medicare for 8,781 patients and an additional 147 audiologists billed Medicare $38.00 to $43.00 for 20,422 patients, according to CMS data. This suggests that some audiologists are submitting charges to Medicare at 

### TABLE 2. Definitions of terminology.

<table>
<thead>
<tr>
<th><strong>Medicare-Allowable Rates</strong></th>
<th>also are known as the Physician Fee Schedule. This is the amount that Medicare will pay for a procedure or service.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Submitted Charges of the Audiologist</strong></td>
<td>also are known as the usual and customary charges and represent the amount the audiologist submits to Medicare for payment for a procedure or service.</td>
</tr>
<tr>
<td><strong>Medicare Payment</strong></td>
<td>represents the actual amount paid by Medicare for a procedure or service. Traditional Medicare pays 80 percent of the allowable, and the beneficiary is responsible for a 20 percent co-payment.</td>
</tr>
</tbody>
</table>
or below the authorized Medicare-allowable charge.

When a submitted charge to Medicare is less than the authorized allowable, Medicare only pays 80 percent of the submitted charge. It is assumed by Medicare that the costs necessary to deliver services are lower than the costs calculated by CMS when the fee schedule was developed.

Similarly, for clinics that charge more than the Medicare fee schedule, it must be assumed that their clinic costs are higher. It is understandable that fees will differ nationally and across clinics. Of course, the key question is whether the amount charged was sufficient to meet the financial and operational needs of the clinic.

The finding was similar for Tympanometry (92567), where the average Medicare allowable charge was $14.38. Medicare pays 80 percent of the allowable amount, which we assume would be average payments of $11.50 to the audiologist, with the 20 percent balance paid by the patient or co-payer.

However, the average payment to audiologists was $10.21. Again, there were a wide range of charges submitted by audiologists, ranging from $12.00 to $274.00, for a tympanogram (92567), and the average charge submitted by audiologists was $46.12.

This is a time when pricing is being closely scrutinized in health care and, especially, in hearing health care for two reasons: (1) Over-the-counter (OTC) products will be entering the commercial market and (2) the U.S. Department of Health and Human Services is considering a study of the risks or benefits of allowing audiologists to furnish audiology services directly to Medicare beneficiaries without a physician referral (U.S. House of Representatives, 2020). Therefore, it is a good time to assess pricing.

| TABLE 3. Example of professional services and associated CPT codes within an audiology practice. |
|---|---|
| PROCEDURE | CPT |
| Comprehensive Audio | 92557 |
| Tympanometry/Reflexes/Decay | 92570 |
| Otoacoustic Emissions (OAE) Diagnostic | 95288 |
| Basic Vestibular Evaluation | 92540 |
| Synthetic Sentence Identification (SSI) Test | 92576 |
| Auditory Evoked Potentials | 92585 |
| Evaluation for Surgically Implanted Device Candidacy | 92626 |
| Hearing Aid Evaluation | | |
| Hearing Aid Fitting | | |
| Counseling, Follow-Up Visits (15-Minute Increments) | | |
| Legal Deposition (Per Hour) | | |
and fee schedules to assure the profession is properly valued in the health-care system.

Fee and Pricing Strategies for Audiology Practices

A practical approach to setting fees and prices for products and services begins by understanding the financial needs of the practice and the costs associated with delivering quality patient care. This does not account for some of the psychological aspects of pricing, nor does it consider the pricing constraints associated with third-party payments such as the Medicare fee schedule. Instead, the following steps are proposed to assist the audiologist in understanding the value of their services and the financial requirements to keep a practice operating efficiently and profitably.

**Step 1.** List the services provided in the practice (see the example in TABLE 3). This could be a list associated with CPT codes, but some procedures may not have relevant codes (such as legal depositions, noise studies, consulting, etc.). The key is to list everything offered by the practice.

**Step 2.** Know the costs associated with delivering services. TABLE 4 presents a list of overhead expenses, exclusive of the cost of goods and products for a practice, based on lists provided by Traynor (2019b).

For this example, it is estimated that expenses average $25,425 per month or $305,100 per year, exclusive of the costs associated with purchasing products. These often are referred to as the costs to “keep the doors open,” or the costs that must be covered, even if the practice had to close its doors for a period of time due to a special event (e.g., natural disaster, illness, pandemic, vacation, etc.).

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>COST EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Insurances</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>Loan Repayment</td>
<td>$18,000.00</td>
</tr>
<tr>
<td>Utilities (e.g., phone, internet)</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Postage/Mail</td>
<td>$600.00</td>
</tr>
<tr>
<td>Supplies (office and clinic)</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Marketing</td>
<td>$18,000.00</td>
</tr>
<tr>
<td>Administrative Salaries/Benefits</td>
<td>$45,500.00</td>
</tr>
<tr>
<td>Audiologist Salary/Benefits</td>
<td>$130,000.00</td>
</tr>
<tr>
<td>Professional Fees (e.g., accounting, legal)</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>License and Memberships</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Professional Development/Travel</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Miscellaneous (e.g., coffee, magazine subscriptions, etc.)</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Reinvestment for Practice</td>
<td>$50,000.00</td>
</tr>
<tr>
<td><strong>Total Annual Expenses (not including products)</strong></td>
<td><strong>$305,100.00</strong></td>
</tr>
</tbody>
</table>

**TABLE 4.** Example of annual overhead expenses exclusive of product costs.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>MONTH</th>
<th>ANNUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workdays</td>
<td>20 days</td>
<td>220 days</td>
</tr>
<tr>
<td>Billable Hours @ 6 Hours/Day</td>
<td>120 hours</td>
<td>1,320 hours</td>
</tr>
<tr>
<td>Revenue Needed to “Keep the Doors Open”</td>
<td>$305,100</td>
<td></td>
</tr>
<tr>
<td>Revenue/ Hour</td>
<td></td>
<td>$231.14</td>
</tr>
<tr>
<td>Revenue/Minute</td>
<td></td>
<td>$3.85</td>
</tr>
</tbody>
</table>

**TABLE 5.** Revenue required to operate practice.
Step 3. The next step requires a projection of the number of hours the audiologist will provide billable services per month and per year and the revenue required per hour to operate the practice (TABLE 5).

In a typical month, services may be delivered five days per week, 20 days per month, six hours per day or 120 billable hours per month. With consideration for holidays, vacations, or other factors requiring office closure, there could be 1,320 billable hours per year (11 months). Of course, this may vary by audiologist.

Based on the number of billable hours per year and a goal, in our example, of generating $305,100 per year to cover expenses, the revenue required per hour to operate this practice is $231.14, or $3.85 per minute (TABLE 5).

Step 4. These projections are applied to establishing a fee schedule. Each clinic should be able to estimate its own usual and customary time required to complete a procedure.

If it is estimated that the procedure, on average, takes one hour, then a good starting point for establishing a fee for this procedure is $231.14, based on the need to generate $3.85 per minute to operate the practice. These should be considered as starting points for establishing fees.

Other factors that could influence fees include, for example, the knowledge and skills required to perform a special service such as a legal deposition or pediatric services. In our example, while $231.14 may be required per hour to meet the financial needs of the practice, the specialization of the services

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may justify a higher hourly rate for some of these services.

Hearing aid pricing and treatment plans also can be set following these steps. In a bundled model, for example, it may be determined that the patient will receive 10 hours of service associated with the fitting and sale of the products in the first year.

At $231.14 per hour, the patient may be charged $2,311.40 for the professional services, plus the cost of the products for a one-year plan. Of course, this would vary based on the number of years of service bundled into the service plan, warranties, and the levels of technology associated with the patient needs.

As more patients purchase over-the-counter or online products, they still will require the services of audiologists to provide the services necessary to assure success with amplification. Setting fees for these services, excluding the price of the product, can add value to the practice and the patients.

Conclusion
The rules of economics, finance, and management apply to audiology practices and it is important to know costs while defining professional and financial goals. Focus on evidenced-based and patient-centered practice, but also know your value. Remember, in health care, patients and third parties are looking at outcomes and the value associated with the services, rather than the costs associated with the services.

Audiologists should set their prices so that the practice will be solvent and profitable, while also placing a fair value on the practice and profession. Appropriate and justifiable pricing also will send a consistent message to third parties about the value of our knowledge, skills, and services.

Barry A. Freeman, PhD, is president of Audiology Consultants, Inc., in Parkland, Florida.

Ian M. Windmill, PhD, is the director at Cincinnati Children’s Hospital and a professor at the University of Cincinnati School of Medicine in Cincinnati, Ohio.

References


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Noise-induced hearing loss
Acoustic neuroma/vestibular schwannoma
Impacted cerumen
Otitis media
Comorbidities
Vestibular disorders
How to Choose the Right Real-Time Captioning Methods for Greater Accessibility

By Joe Duarte

Real-time captioning for smartphones and computers can improve accessibility for many with hearing loss. But, choosing the right method for specific situations can be challenging, with three primary types of systems available, including:

- Communication Access Realtime Translation (CART): Stenographers transcribe the other party’s words. Highly accurate; stenographer can easily identify multiple voices and provide non-verbal prompts (e.g., sounds, laughter).
- Re-voicing Communications Assistants (CAs): Primarily used by traditional telecommunications relay services (TRS). CA revoices the other party’s words; ASR converts to text.

Today, smartphone applications (apps) can provide real-time captioning virtually everywhere. But different apps have different purposes.

CART, or an app that switches between CART and ASR, could be the most accessible solution for smartphone calls. Non-TRS ASR apps can help with in-person conversations, especially when people are wearing masks.

For video conferencing, some CART and ASR tools support real-time captioning, either in-app or by dialing-in to a stenographer. It’s important that multiple speakers are identified; CART generally supports this; not all ASR systems will.

Mobile captioning solutions are becoming more available and advanced. Trying several will help users decide what works best for them, even if that means using different apps for different situations.

CONTENT PROVIDED BY INNOCAPTION.

Joe Duarte is co-CEO of InnoCaption, which provides real-time captioning via CART or ASR for smartphone call communications. Find out more at https://innocaption.com.

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CODING AND REIMBURSEMENT

CPT Coding Changes for 2021: Auditory Evoked Potentials and Vestibular Evoked Myogenic Potentials

By Anna Marie Jilla and Annette A. Burton

Introduction
The American Academy of Audiology (the Academy), together with the American Speech-Language-Hearing Association (ASHA), continuously reviews the CPT code set applicable to audiologists. The goal is to ensure that audiologists have appropriate codes to report that accurately describe and reflect the services they perform for patients.

Our organizations, with support from the American Academy of Neurology and the American Academy of Otolaryngology-Head and Neck Surgery, led an effort to obtain new codes for the reporting of auditory evoked potentials (AEPs) and vestibular evoked myogenic potentials (VEMPs).

In 2017, CPT code 92585 – Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive was identified by the American Medical Association (AMA)/Specialty Society Relative Value Scale Update Committee’s Relativity Assessment Workgroup in a screening that identifies procedures billed to
Medicare with use counts of more than 30,000. Because code 92585 had not been reviewed since 1996, an action plan was created to refer 92585 to the AMA CPT Editorial Panel.

Since the initial development of CPT 92585 and 92586, there have been significant changes in practice patterns and procedures for evaluating the AEP response. With only two codes (92585 and 92586) to encompass the wide variety of AEP procedures, the creation of more specific codes and descriptors seemed to be a logical next step for the AEP code family.

VEMP testing originally did not have a separate and distinct CPT code. Prior to the creation of new codes in this area, VEMP testing was reported using 92700—Unlisted otorhinolaryngological procedure (CPT Assistant, 2011).

Discussion among CPT representatives from the Academy, the American Speech-Language-Hearing Association (ASHA), the American Academy of Neurology (AAN), and the American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) resulted in a plan to:

- Eliminate two of the existing codes in the AEP family:
  - 92585 (Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive)
  - 92586 (Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; limited)

- Propose four new codes for AEP testing:
  - Three new codes related to the assessment of hearing function.
  - One new code related to the diagnostic assessment of auditory nervous system integrity.

- Create code(s) for VEMP testing.

**New AEP Codes**

As indicated above, the first three of the new AEP codes relate to the assessment of hearing function and the fourth code is specifically designed to report activities related to neuro-diagnostic, site of lesion testing (CPT Assistant, 2020). It should be noted that these codes do not reflect new AEP procedures, but more clearly define the work that is involved for each code.

92650—Auditory evoked potentials; screening of auditory potential with broadband stimuli, automated analysis

This code would be reported when using automated testing procedures to determine whether AEP responses are present or absent (pass/refer response). This procedure would be most commonly used in universal newborn hearing screening programs, but may be used under certain circumstances in other places of service for patients who are not newborns.

92651—Auditory evoked potentials; for hearing status determination, broadband stimuli, with interpretation and report

This code would be reported when using non-automated testing procedures for hearing-status determination. Typically, AEP responses to broadband stimuli are obtained at moderate to high levels and at a lower intensity level. The higher levels are used to
evaluate the neural integrity of the AEP response (e.g., to rule out auditory neuropathy, sensory or permanent conductive hearing loss). At higher levels, wave-form identification, integrity, absolute and inter-wave latencies are analyzed. The lower stimulus levels are used to identify normal AEP function or to confirm hearing impairment and the need for additional frequency-specific threshold testing (see 92652).

**92652**—Auditory evoked potentials; for threshold estimation at multiple frequencies, with interpretation and report (Do not report 92652 in conjunction with 92651.)

This code would be reported for activities related to the determination of type, severity, and configuration of hearing loss by measuring the auditory brainstem response (ABR) or auditory steady-state response (ASSR) threshold response at multiple frequencies. Since the higher intensity level wave-form analysis described in 92561 is typically performed in conjunction with threshold identification, 92561 should not

### Table 1. CPT code changes for AEP and VEMP effective January 1, 2021.

<table>
<thead>
<tr>
<th>DELETED CODES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>92585</td>
<td>Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive</td>
</tr>
<tr>
<td>92586</td>
<td>Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; limited</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NEW AEP CODES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>92650</td>
<td>Auditory evoked potentials; screening of auditory potential with broadband stimuli, automated analysis</td>
</tr>
<tr>
<td>92651</td>
<td>Auditory evoked potentials; for hearing status determination, broadband stimuli, with interpretation and report</td>
</tr>
<tr>
<td>92652</td>
<td>Auditory evoked potentials; for threshold estimation at multiple frequencies, with interpretation and report (Do not report 92652 in conjunction with 92651.)</td>
</tr>
<tr>
<td>92653</td>
<td>Auditory evoked potentials; neurodiagnostic, with interpretation and report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NEW VEMP CODES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>92517</td>
<td>Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) (Do not report 92517 in conjunction with 92270,* 92518, 92519.)</td>
</tr>
<tr>
<td>92518</td>
<td>Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; ocular (oVEMP) (Do not report 92518 in conjunction with 92270,* 92517, 92519.)</td>
</tr>
<tr>
<td>92519</td>
<td>Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) and ocular (oVEMP) (Do not report 92519 in conjunction with 92270,* 92517, 92518.)</td>
</tr>
</tbody>
</table>

*92270—Electro-oculography with interpretation and report (ophthalmology code)
be reported in conjunction with 92652, as the work of 92561 is accounted for in the valuation of 92652.

92653—Auditory evoked potentials; neurodiagnostic, with interpretation and report

This code would be reported for activities related to neurodiagnostic evaluation of the VIII cranial nerve and/or auditory brainstem. Differentiating characteristics of 92653 and 92651 pertain to the motivations and impetus for testing. For example, if the primary concern is neurologic in nature (e.g., a space-occupying lesion or the integrity of the VIII cranial nerve and/or the auditory brainstem), 92653 would be reported.

The 92653 procedure serves to identify a primary neurologic concern, of which hearing loss may or may not be a secondary concern. It is not appropriate to report 92653 in conjunction with other AEP codes (92651 and 92652), as these procedures are distinct and separate in their descriptions and professional work.

New VEMP Codes

92517—Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) (Do not report 92517 in conjunction with 92270, 92518, 92519.)

This code would be reported for evaluation of function of the saccule and inferior vestibular nerve (cVEMP response). Report when only a cVEMP evaluation is performed.

92518—Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; ocular (oVEMP) (Do not report 92518 in conjunction with 92270, 92517, 92519.)

This code would be reported for evaluation of function of the utricle and superior vestibular nerve. (oVEMP response). Report
CODING AND REIMBURSEMENT

when only an oVEMP evaluation is performed.

92519—Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) and ocular (oVEMP) (Do not report 92519 in conjunction with 92270, 92517, 92518.)

This code would be reported for evaluation of both saccular and utricular function, as well as the superior and inferior portions of the vestibular nerve (cVEMP and oVEMP responses). Report when both cVEMP and oVEMP evaluations are performed.

Conclusion
As clinicians begin reporting these new CPT codes on January 1, 2021, it is expected that case-specific questions may arise. Members are encouraged to contact the Academy’s Coding and Reimbursement Committee at reimbursement@audiology.org for more information. Additional educational resources from the Academy to support continued learning will be forthcoming.


Annette A. Burton, AuD, is the director of the Easterseals Center for Better Hearing in Connecticut. She is a member of the Academy’s Practice Policy Advisory Committee and serves as the American Medical Association CPT-Health Care Professionals Advisory Committee (HCPAC) alternate advisor for the American Academy of Audiology.

The purpose of the information provided above by the American Academy of Audiology Coding and Reimbursement Committee is strictly for educational guidance to audiologists. Action taken with respect to the information provided is an individual choice. The American Academy of Audiology hereby disclaims any responsibility for the consequences of any action(s) taken by any individual(s) as a result of using the information provided, and reader agrees not to take action against, or seek to hold, or hold liable, the American Academy of Audiology for the reader’s use of the information provided. As used herein, the “American Academy of Audiology” shall be defined to include its directors, officers, employees, volunteers, members, and agents.

Resources


Anna Marie Jilla, AuD, PhD, is a postdoctoral fellow in the Cochlear Center on Hearing and Public Health at Johns Hopkins University in Baltimore, Maryland. She is a member of the Academy’s Coding and Reimbursement Committee.
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The year 2020 brought with it many surprises and challenges across the health-care landscape. As 2021 begins, the Academy is actively engaged with several legislative and regulatory initiatives to safeguard and advance the profession of audiology. While it is impossible to predict everything that may arise, a few issues are likely to be at the forefront of the national conversation related to audiology.

The Medicare Audiology Access and Services Act (Joint Audiology Bill)
The Academy’s top legislative goal will continue to be advocating for the passage of the joint audiology bill. Since the introduction of the legislation in 2019, the Academy has worked with other audiology stakeholders to secure congressional champions and lobby to garner additional support for the Medicare Audiology Access and Services Act of 2019. This legislation would grant audiologists “practitioner” status in Medicare, remove the physician referral requirement, and allow audiologists to provide and be reimbursed for diagnostic and treatment services.

Passage of these key elements of the joint legislation are critical to advancing the profession of audiology. Practitioner status allows audiologists to provide services through telehealth, lays the foundation for proper recognition of the profession by other health professions, and provides a stepping stone to increased reimbursement opportunities for audiologists.

According to a report by a consulting firm, the passage of the joint audiology bill would...
result in a relatively modest federal outlay over the next decade and would eliminate duplicative services and reduce Medicare beneficiary copays. A new Congress will begin in 2021 and the Academy is strategizing with other stakeholders for the reintroduction of this legislation.

**Release of Proposed Over-the-Counter Hearing Aid Regulations**

The U.S. Food and Drug Administration (FDA) was originally set to release draft regulations on over-the-counter (OTC) hearing aids in August 2020 to implement the Over-the-Counter-Hearing Aid Act of 2017. The release of these regulations was delayed because of COVID-19. We anticipate the FDA will release OTC regulations in the first quarter of 2021. When released, the Academy will move swiftly and provide comments to the FDA to preserve patient safety, ensure device efficacy, and safeguard and advance the profession of audiology.

Watch for Academy news with more information when the FDA releases guidance.

**Possible Changes to Medicare?**

With a new Congress, health-care reform is likely to be a popular topic on Capitol Hill. At the end of 2019, H.R. 3, a comprehensive drug pricing bill, passed the full House of Representatives. Before passage, three separate provisions were added to the bill to expand Medicare to cover hearing, vision, and dental care.

The Academy, along with Academy of Doctors of Audiology (ADA) and the American Speech-Language-Hearing Association (ASHA) worked to incorporate certain aspects of the joint audiology bill (coverage of treatment services, Medicare practitioner status, and a study on direct access) into H.R. 3. While H.R. 3 was ultimately unsuccessful, it is likely that the issue of Medicare expansion will surface again in 2021. The Academy is actively engaged with members of the House and Senate to advance the position of audiologists.

**The Future of Telehealth?**

Across the country, providers and patients have turned to telehealth services. As audiologists, we have had to be creative and thoughtful as we provide services remotely for our patients. The Academy was successful in getting the Centers for Medicare and Medicaid Services (CMS) to allow audiologists to provide services via telehealth during the pandemic, but this recognition is time limited and covers only two cochlear implant-related codes.

The Academy is monitoring and participating in conversations at both the state and federal level focused on the continuation of the ability to provide telehealth services throughout the pandemic and post-pandemic. This struggle for recognition regarding telehealth further solidifies the need to attain “practitioner” status in Medicare—as this designation would allow for the provision of telehealth services.

**What Can You Do?**

Audiologists everywhere can get involved and help the profession in several ways:

1. Speak up. As issues arise in Washington, DC, or closer to home, contact your elected representatives.

   You can simply pick up the phone and call in to express your concern. Also, try to set up a meeting when your elected officials are back in your district. The Academy will help
Academy members contact representatives and prepare for meetings when key legislative issues are being discussed.

2. Check the Legislative Action Center on the Academy website (www.audiology.org/get-involved/advocacy/legislative-action-center).

3. Join the Academy’s Grassroots Advocacy Network to gain information on and actively participate in the Academy’s advocacy efforts (www.audiology.org/advocacy/grassroots-advocacy-network).


Jodi Baxter, AuD, is a clinical assistant professor with The Ohio State University Speech-Language-Hearing clinic. She is the chair of the Academy’s Government Relations Committee.

Lee Cottrell, AuD, is the director of audiology at the Balance and Hearing Institute at Farragut ENT and Allergy in Knoxville, Tennessee. He is the chair-elect of the Academy’s Government Relations Committee.

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Congratulations to the 2020 Scholarship Award Winners

The American Academy of Audiology Foundation’s mission is to promote philanthropy in support of public awareness, research, and education in audiology and hearing and balance science.

Offering a variety of scholarships to students pursuing degrees in audiology is one way in which the Foundation fulfills its mission to support education. The Foundation is pleased to announce the recipients of its scholarship programs in 2020.

Sadanand Singh Memorial Scholarship

The Sadanand Singh Memorial Scholarship is awarded to a minority and/or international student who shows exceptional promise in audiology research. The scholarship was established to honor Dr. Sadanand Singh, an educator, scientist, publisher, and philanthropist, to celebrate his dedication to research and the next generation of scientists working on hearing health care.

The 2020 scholarship of $500 was awarded to Leslie Zhen from the University of Pittsburgh. Leslie is a fourth-year PhD student whose area of interest is auditory perceptual learning.
**Judith Blumsack Scholarship**

The Judith Blumsack Scholarship is awarded to a student who demonstrates outstanding clinical skills and who shows promise in terms of clinical research and service to the professional community and/or the community at large. Dr. Blumsack was on the faculty at Auburn University and a former member of the AAA Foundation Board of Trustees. She retired in 2014, at which time students, colleagues, family, and friends came together to create a $500 scholarship in her name.

The 2020 Judith Blumsack Scholarship winner is Maddie Olson from the University of Wisconsin – Madison. Maddie is a fourth-year AuD student whose interest is hearing research. She is particularly interested in working with patients who are potential candidates for, or are recipients of, cochlear implants.

**Continued Achievement Scholarships**

The Continued Achievement Scholarships, sponsored by AudiologyOnline, are awarded to students who show exceptional promise in providing outstanding patient care as clinical audiologists. This scholarship program provides a $2,000 award for two students each year.

In 2020, these scholarships were awarded to Meredith Braza of The University of North Carolina at Chapel Hill and Rhonda Labib of the University of the Pacific.

Meredith Braza is a third-year AuD student who has an interest in conducting clinical research in pediatric audiology assessment.

Rhonda Labib is a second-year AuD student who has a passion for alleviating the cultural, economic, and societal barriers that stand between an individual and the help they need.
Jerry Northern Scholarships in Pediatric Audiology

The Jerry Northern Scholarships in Pediatric Audiology, generously funded by Dr. Jerry Northern, are awarded to students who show exceptional promise as clinical audiologists with a focus on the specialty of pediatric audiology. Winners of this scholarship program receive $10,000 and a $500 stipend to attend the Academy’s annual conference.

The 2020 recipients are Kendall Carroll, Vanderbilt University; Arielle Darvin, Vanderbilt University; Lauren O’Neil, University of Wisconsin – Madison; Sara Pupa, University of Pittsburgh; Caitlin Sapp, University of Iowa; Kyli Schultz, University of Texas at Austin; and Delphanie Wu, Vanderbilt University. Their biographies were featured in the November/December issue of Audiology Today and may be viewed online at www.audiologyfoundation.org/news/congrats-recipients-2020-jerry-northern-scholarships-pediatric-audiology.

The AAA Foundation will accept applications beginning January 15, 2021, for the Judith Blumsack Scholarship, the Sadanand Singh Memorial Scholarship, the Continued Achievement Scholarships, the Jerry Northern Scholarships in Pediatric Audiology, and the Empowering Students Scholarships for the 2021–2022 academic year.

The application deadline is April 30, 2021, for all scholarships except the Jerry Northern Scholarships in Pediatric Audiology, which has a deadline of May 31, 2021.
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The Academy’s Loyalty Media Programs offer organizations the opportunity to connect with Academy members and the audiology community.

You can find participants featured here in Audiology Today magazine, on our Web site (www.audiology.org), and at Academy events. Consider supporting the companies that support your association.

Current Loyalty Media Program companies include:

For more information about the program, contact Eric Gershowitz at eric.gershowitz@mci-group.com.
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** Gordey & Rumley, 2019, Oticon Whitepaper
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