



February 10, 2025

The Honorable Jeff Wu Acting Administrator Centers for Medicare & Medicaid Services U.S. Department of Health and Human Services 7500 Security Boulevard Baltimore, MD 21244

RE: Request to Add Services to the Telehealth List for Calendar Year 2026

Dear Administrator Wu:

On behalf of the American Speech-Language-Hearing Association (ASHA), I write to request that telehealth services provided by audiologists and speech-language pathologists (SLPs), as represented by Current Procedural Terminology (CPT®) codes, be permanently added to the telehealth services list effective January 1, 2026.

ASHA is the national professional, scientific, and credentialing association for 234,000 members, certificate holders, and affiliates who are audiologists; SLPs; speech, language, and hearing scientists; audiology and speech-language pathology assistants; and students. Many audiologists and SLPs provide outpatient telehealth services to Medicare beneficiaries in a variety of health care settings, including private practices, physician offices, clinics, rehabilitation agencies, skilled nursing facilities, home health, and hospital outpatient departments. Therefore, we believe the Category 2 criteria that CMS established has been met for adding these services to the telehealth services list on a provisional basis.

Audiologists and SLPs are Qualified and Authorized to Provide Telehealth Services

Audiologists and SLPs are trained and qualified to provide telehealth services, which has been recognized by numerous states and payers. Prior to the public health emergency (PHE), more than 20 states had licensure laws authorizing audiologists and SLPs to provide telehealth services. Since then, more states, state Medicaid programs, private insurers, and the Veterans Administration have permanently authorized audiologists and SLPs to provide telehealth services. In addition, research demonstrates the efficacy of audiology and speech-language pathology services delivered via telehealth and its equivalent quality as compared to in-person service delivery for a wide range of diagnostic and treatment procedures for adults and children.^{1,2,3} Studies have shown high levels of patient, clinician, and caregiver satisfaction supporting telehealth as an effective alternative to the in-person model for delivery of care.^{4,5}

Recognition of audiologists and SLPs as qualified telehealth providers by policymakers at the state, federal, and payer level is based not only on their education, training, and skill but on the keen understanding of the ethical standards to which these clinicians hold themselves. ASHA's *Code of Ethics* requires that clinicians use their clinical judgment to determine the most appropriate services for their patients and deliver care via telehealth only if the services are equal in quality to those delivered in person.⁶ Delivering care that does not meet the standard for in-person care is a violation of ASHA's *Code of Ethics*, which helps ensure patient protection when receiving telehealth services from ASHA-certified audiologists and SLPs.

When determining whether to provide a service to a patient—regardless of the patient's form of insurance or payment method—audiologists and SLPs undertake a decision-making process that includes consideration of:

- a patient's comfort level with and desire to receive telehealth services;
- a patient's access to technology (e.g., broadband access, computer, tablet) and familiarity with the technology;
- a patient's social determinants of health that contribute to barriers to in-person services (e.g., proximity to qualified providers, transportation, affordability of health care);
- a patient's clinical presentation;
- comparability of quality and outcomes between methods of service delivery (e.g., in person or telehealth);
- the need to switch between in-person and telehealth services during the episode of care based on the patient's needs or desires;
- the need for a facilitator to assist a patient during a telehealth session; and
- whether using telehealth will help the clinician identify additional information about the
 patient's home environment that can enhance their ability to develop a tailored plan of
 care or identify compensatory strategies that will enhance the patient's quality of life and
 outcomes.

In addition to their clinical expertise and ethical standards, data shows high levels of patient satisfaction with telehealth as well as high quality of care and outcomes of telehealth services. To date, ASHA has analyzed multiple sources of data to gain an understanding of utilization, outcomes, and satisfaction, including claims data, registry data, ASHA member survey data, and data from the peer-reviewed literature. We believe this data, described in more detail below, demonstrates the importance of maintaining the authorized telehealth services list permanently.

A. Claims Data

ASHA conducted an extensive review of 2023 Medicare office/outpatient claims data for audiology and speech-language pathology services and found that services were judiciously provided via telehealth. In fact, claims data show that these telehealth services typically accounted for 4% to 6% of total claims for each procedure code. It only slightly increased from our analysis of 2022 data, which showed telehealth utilization for most audiology and speech-language pathology services was, on average, around 3%. This demonstrates that the delivery of audiology and speech-language pathology services via telehealth remains a small, but important, method of service delivery.

In addition, a report from the Department of Health and Human Services Office of Inspector General reinforced that the threat of fraud and abuse of telehealth may be less significant than previously thought, as only 0.2% of all telehealth claims submitted during the COVID-19 pandemic were identified as high risk for fraud.⁷

B. Registry Data

ASHA analyzed utilization and outcomes data from our registry, the National Outcomes Measurement System (NOMS), which has been used by ASHA members for nearly 20 years.⁸ Recently, NOMS underwent a significant redesign and was relaunched in the second quarter of 2021. As of January 2025, the registry includes data on approximately 142,000 episodes that involve more than 27,000 Medicare Part B beneficiaries. The data from the beneficiaries who received speech-language pathology services through telehealth indicated 1) high levels of patient satisfaction and 2) clinician- and patient-reported outcome measures with gains that were similar to those who received in-person services. The data show that patient satisfaction and outcomes for telehealth services remain strong and, in some cases, have improved over the last year.

Patient-reported satisfaction data in NOMS show that 100% of patients who received at least one telehealth service reported involvement in developing the plan of care, and 93% to 100% had a better understanding of their condition or illness. Between 87% and 93% of individuals receiving telehealth services reported improvement in their condition and indicated that they have the necessary skills to participate in work or social activities. Approximately 60% of patients who completed the Communication Participation Item Bank scale noted improvement during their episode of care. Clinicians delivering services via telehealth also reported high levels of patient functional improvement associated with spoken language expression, spoken language comprehension, voice, intelligibility, and cognition, with many patients experiencing progress of 20% or more from admission to discharge based on the functional communication measures included in NOMS. Clinicians also reported that patients receiving telehealth services were more likely to adhere to their treatment plan, with a 6% to 15% increase in completion of a home program.

C. ASHA Member Survey Data

In June 2024, a random sample of ASHA's membership was surveyed on the quality and outcomes of telehealth as well as the cost of delivering services via telehealth. The vast majority (81%) of survey respondents noted they provide both in-person and telehealth services and that they have significant annual costs (on average \$1,380) to maintain access to telehealth services for patients, including equipment purchases, access to high-speed internet, and the use of secure, HIPAA-compliant software. Additionally, 68% of respondents reported that they provide the same materials (e.g., written materials, evaluation materials, therapy tools) regardless of the service delivery method. Clinicians also reported additional benefits for patients who receive services via telehealth. For example, the majority of clinicians who responded to the survey noted reduced patient costs for time off from work or travel costs, a reduction in missed visits, and prevention of adverse outcomes like hospital readmissions due to timely access to care. More than half of respondents also reported increased patient compliance with the plan of care.

The Medicare Payment Advisory Commission (MedPAC) has also reported Medicare beneficiary satisfaction with telehealth services exceeds 90%, further substantiating the results of ASHA's survey.

While we acknowledge Congress must change the law to permanently add audiologists and SLPs as authorized providers of telehealth services, it has already done so on numerous occasions; most recently with passage of the bipartisan, bicameral American Relief Act, 2025, which extends telehealth coverage for these clinicians through March 31, 2025. Legislation was introduced in the 118th Congress to extend permanent telehealth coverage for audiologists and SLPs. The Expanded Telehealth Access Act (H.R. 3875/S. 2880)—which members of Congress and stakeholders, including ASHA, are committed to reintroducing in the 119th Congress— would provide permanent statutory authority for audiologists and SLPs to deliver telehealth services under Medicare Part B. In the House of Representatives, the Ways and Means Committee unanimously passed the Preserving Telehealth, Hospital, and Ambulance Access Act (H.R. 8261), while the Energy and Commerce Committee unanimously passed the Telehealth Modernization Act of 2024 (H.R. 7623). Both bills included a two-year extension of telehealth authority for audiologists and SLPs. In addition, the bipartisan CONNECT for Health Act of 2023

(H.R. 4189/S. 2016) would have granted CMS authority to waive any limitation on the types of practitioners eligible to furnish telehealth services under Medicare Part B. It is important that CMS use the intervening time to develop a robust telehealth benefit that can be quickly implemented once Congress acts.

In compiling this request, ASHA considered the clarified telehealth approval guidance, which was finalized through the 2024 Medicare Physician Fee Schedule Final Rule, applicable to services on or after January 1, 2024. For example, we would expect that if an audiologist or SLP were to initiate an evaluation or treatment service via telehealth, the full service would be provided and the requirements associated with billing the CPT code would be met. In other words, it would be unlikely that a portion of the service would be provided via telehealth and the remainder of the service would be provided in person. An example of where that might happen is if there were an unexpected clinical or technological problem such as the Internet connection was lost. In that scenario, the clinician would only bill for the service once—not twice—once the remainder of the service was provided after the interrupted telehealth session.

Another element of the clarified guidance relates to the quality and efficacy of telehealth services. In the rule, CMS noted that the quality and efficacy of telehealth services must be equal to in-person services. ASHA believes—and research shows—that all of the CPT codes we are requesting CMS add to the telehealth services list are comparable in quality and efficacy to in-person services. In addition, offering services via telehealth provides other forms of benefit such as improved compliance with the plan of care, improved access by reducing the number of missed sessions and appointment wait times, and reduced beneficiary costs for travel or time off of work, as described in more detail above. ^{9,10,11,12}

It is our understanding that none of the criteria finalized in the 2024 rule requires the predominant biller to be physicians. However, previous submissions by nonphysicians (e.g., physical therapists) were denied by CMS, in part, because the predominant biller was not an authorized telehealth provider per 1834(m) of the Social Security Act. Since the criterion was not finalized, this would not be an appropriate rationale for a denial of our request. If CMS approved these services for addition to the authorized telehealth services list, they could still be provided by SLPs incident to a physician. And, given Congress's interest in permanent telehealth authority, CMS should develop a robust benefit that can be implemented expeditiously. Therefore, ASHA requests that CMS consider the clinical appropriateness and need for access to telehealth services provided by audiologists and SLPs—independent of billing data—when considering our request.

Audiology Services Recommended for Inclusion on the Telehealth Services List

Approximately 25% of adults between the ages of 65 and 74 and 50% who are 75 and older suffer from hearing loss.¹³ Untreated hearing loss contributes to accelerated cognitive decline, social isolation, communication challenges, higher risk of mortality, and mental health challenges.^{14,15,16,17} Despite increased recognition of the health and socioeconomic consequences of untreated or undertreated hearing loss, hearing rehabilitation remains persistently low in the United States.^{18,19} In addition, according to an ASHA member survey conducted in 2023, 44% of respondents stated that the number of open positions within their organization (e.g., hospital, clinic) exceeds job seekers. This is up from 29% in the 2021 survey, which indicates the problem is getting worse. Since the need for audiologists is greater than the supply of audiologists available, telehealth could serve as a mechanism for maintaining access to care for patients.²⁰

Facilitating access to audiology services by adopting audiologic CPT codes to the authorized telehealth services list is critical. Audiologists provide audiologic and vestibular testing under the Medicare diagnostic benefit category with referral from a physician. Those providing telehealth services use computer peripherals—such as audiometers, auditory brainstem response (ABR), otoacoustic emissions (OAEs), and immittance testing equipment—that can be interfaced to existing telehealth networks to conduct hearing diagnostic services, including:

- auditory function evaluation for pre-implant candidacy and post-implant status,
- cochlear implant (CI) fitting and programming,
- pure-tone audiometry,
- speech-in-noise testing, and
- video otoscopy.

As hearing implant technology (e.g., CIs, osseointegrated devices) evolves, more patients have access to implant devices with synchronous or store-and-forward capabilities.

Therefore, ASHA recommends including the following diagnostic audiologic and CI testing CPT codes on the authorized telehealth services list and offers select clinical scenarios illustrating how these services are safely and effectively provided via telehealth.

Diagnostic Audiologic Testing

ASHA recommends adding audiologic testing CPT codes to the telehealth list that represent core diagnostic tests for identifying the type, severity, and etiology of hearing loss or the need for further vestibular testing.

Audiologists can conduct testing for any of the listed services using remote access software to connect with a computer-based audiologic diagnostic testing system at the originating site. In addition, audiologists can use a video otoscope connected to the same computer to examine the ear before testing to ensure cerumen will not impede testing. A trained facilitator at the originating site may act as an extension of the audiologist and perform very specific tasks at the audiologist's direction, such as positioning the video otoscope or placing headphones on the patient. Even with the use of a facilitator, the audiologist's skillset is required to determine what tests to perform, direct the actions of the facilitator, analyze and interpret the data, and develop the plan of care, which could include patient education, management/technology recommendations, dispensing of appropriate technology, and referrals to other members of the clinical team.

Audiology telehealth services are well-established and diagnostic video otoscopy, audiometry, otoacoustic emissions, and ABR conducted remotely yield equivalent results when compared to in-person testing.²¹

RECOMMENDED CPT CODES: Diagnostic Audiologic Testing

- **92550** Tympanometry and reflex threshold measurements
- 92552 Pure tone audiometry (threshold); air only
- 92553 Pure tone audiometry (threshold); air and bone
- **92555** Speech audiometry threshold
- **92556** Speech audiometry threshold; with speech recognition
- 92557 Comprehensive audiometry threshold evaluation and speech recognition

- 92563 Tone decay test
- 92565 Stenger test, pure tone
- 92567 Tympanometry (impedance testing)
- 92568 Acoustic reflex testing, threshold
- **92570** Acoustic immittance testing, includes tympanometry (impedance testing), acoustic reflex threshold testing, and acoustic reflex decay testing
- **92587** Distortion product evoked otoacoustic emissions; limited evaluation (to confirm the presence or absence of hearing disorder, 3-6 frequencies) or transient evoked otoacoustic emissions, with interpretation and report
- **92588** Distortion product evoked otoacoustic emissions; comprehensive diagnostic evaluation (quantitative analysis of outer hair cell function by cochlear mapping, minimum of 12 frequencies), with interpretation and report
- 92625 Assessment of tinnitus (includes pitch, loudness matching, and masking)
- **92651** Auditory evoked potentials; for hearing status determination, broadband stimuli, with interpretation and report
- 92652 Auditory evoked potentials; for threshold estimation at multiple frequencies, with interpretation and report
- **92626** Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour
- **92627** Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes

CLINICAL VIGNETTE: Audiometric Testing

A Medicare beneficiary contacts their physician with complaints of decreased hearing and pronounced ringing in their ears (tinnitus). The physician refers them to the audiologist for diagnostic testing.

When the patient contacts the audiologist's office, they ask the patient if they prefer services in-person or via telehealth. The patient requests the telehealth service because the distance to the audiologist's office from their home is significant and there is a distant site much closer to her home. After a review of the patient's medical record, the audiologist deems the patient a suitable telehealth candidate.

The audiologist provides remote testing from a satellite office while working with a trained facilitator who is at the distant site. The audiologist uses a secure videoconferencing platform to communicate with the patient and facilitator and controls the diagnostic testing equipment (audiometer) through computer-based software with remote access capability. This software is the same as that used in the office for an inperson visit. Before initiating testing, the audiologist reviews case history with the patient, discusses their complaints of hearing loss and tinnitus, and provides a description of how testing will work. The audiologist then directs the facilitator to position the video otoscope to allow the audiologist to view the live video of the ear canal and ensure there are no obstructions in each ear. After the facilitator positions and places headphones on the patient, the audiologist initiates audiometric testing for each ear, including pure-tone air and bone conduction testing at multiple frequencies and speech reception threshold (SRT) and speech recognition testing. During air conduction testing, the audiologist instructs the patient to respond to sounds sent to the headphones by

> raising their hand. For bone conduction testing, the facilitator places a small bone conduction device, as directed by the audiologist. The audiologist sends sounds through the device to gently vibrate the patient's skull, allowing testing of the inner ear. During SRT and speech recognition testing, the audiologist presents appropriate speech materials through the headphones and asks the patient to repeat what they hear. The audiologist completes testing, reviews the audiogram on the computer screen, and discusses the results with the patient before ending the session. The audiologist saves the audiogram and clinical documentation and forwards a copy to the referring physician.

Diagnostic Cochlear Implant Testing

ASHA recommends adding the following testing CPT codes to the telehealth list, which represent diagnostic tests for the analysis, initial programming, and subsequent reprogramming of cochlear implants (CIs). Audiologists can use a videoconferencing platform and computerbased software for remote, synchronous programming of the CI. Some manufacturers may also provide additional technology that supports videoconferencing and remote programming capability.

Initial programming may occur at a satellite clinic/health care facility serving as the originating site because it requires a trained facilitator to assist with placement and connection of the external processor, under the guidance of the audiologist.

Remote programming and reprogramming processes are similar, if not the same, as those used when services are provided in person, including data collection and reporting. The programming software, external speech processor, and implant function in the same way whether operated in person or via telehealth. In both conditions, the programming software and device settings are controlled by the audiologist. CI programming procedures performed via telehealth yield equivalent results to when performed in person. ^{22,23,24,25,26,27,28,29,30}

Many audiologists and researchers have determined that utilization of CIs is much lower than it should be due to a variety of clinical and logistical challenges, despite an abundance of data to support their efficacy and 30 years of FDA approval in the United States. Some studies estimate that CI utilization among adult audiologic candidates range from 2% to 13% despite readily available technology.^{31,32,33,34,35,36} A second study estimates that fewer than 6% of Americans who could benefit from CI have one.³⁷

The developers of an innovative CI care delivery model, known as the Complete Cochlear Implant Care Model (CCIC), believe harnessing the power of telehealth may help overcome the barriers CI candidates face in obtaining the device and that many of the audiologic elements of the evaluation, implantation, and subsequent programming can be completed fully remotely, when clinically appropriate. Patients may experience overwhelming barriers directly associated with receiving CI care, particularly those living in rural areas and must travel great distances, which can result in delayed or forgone treatment.^{38,39,40,41} Challenges around access to relatively scarce high-volume CI centers and a growing population of eligible CI candidates further highlights the need for coordinated, convenient care that expedites treatment and minimizes obstacles for patients.^{42,43}

RECOMMENDED CPT CODES: Diagnostic CI Testing

• **92601** Diagnostic analysis of cochlear implant, patient younger than 7 years of age; with programming

- **92602** Diagnostic analysis of cochlear implant, patient younger than 7 years of age; subsequent programming
- 92603 Diagnostic analysis of cochlear implant, age 7 years or older; with programming
- **92604** Diagnostic analysis of cochlear implant, age 7 years or older; subsequent programming

CLINICAL VIGNETTE: CI Reprogramming

A Medicare beneficiary with a CI has moved to an in-person work environment following several years of working exclusively from home. The new work circumstances require them to function in a different listening environment, changing from quiet and controlled audio-visual based communication to an uncontrolled in-person communication environment with fewer visual supports and additional background noise. The employee contacts their physician because they are having trouble hearing and understanding their coworkers and is unable to function effectively in the new work environment. The physician refers the employee to a CI audiologist.

On the day of the appointment, the audiologist uses a secure videoconferencing platform to discuss the patient's concerns, reviews their communication needs, and collects information about the fit, comfort, and retention of the external devices. Based on the information gathered, the audiologist determines that the patient would benefit from adjustments to their CI programming.

In order for the audiologist to provide secure, synchronous reprogramming of the CI remotely, prior to the appointment they provided the patient with computer-based software and equipment. This software is the same as what is used in the office for an in-person visit. The audiologist provides instructions for opening of the programming software, connecting the patient's external device to the computer, and replacing the external device over the implanted coil. From a separate location, the audiologist remotely accesses the computer software that is connected to the patient's physical device and proceeds with diagnostic analysis of the cochlear implant followed by reprogramming. Once the map is adjusted to the desired settings, the audiologist programs the processor, saves the necessary files for record keeping, and instructs the patient to follow the provided directions on disconnecting equipment and shipping it back to the clinic.

Speech-Language Pathology Services Recommended for Inclusion on the Telehealth Services List

SLPs provide evaluation and treatment services under a physician-certified plan of care as part of the Medicare therapy benefit category. SLPs providing telehealth services evaluate and treat a wide range of speech, language, cognitive, voice, and swallowing disorders associated with stroke, traumatic brain injury, neurodevelopmental disorders, neurodegenerative disease, cancer, and other medical conditions.

Several systematic reviews, meta-analyses, and individual studies indicate that telehealth services are feasible and effective for assessing and treating speech, language, communication, and swallowing disorders and improve access, efficiency, and cost outcomes.⁴⁴ Additionally, individuals who received speech-language pathology telehealth services, on average, had 4.9 fewer sessions and 136 fewer treatment minutes, 21.4% fewer cancellations, 12.9% to 18% fewer missed sessions, and they decreased their appointment wait times by two days.^{45 46}

Compared to in-person services, those who received telehealth services also had higher treatment completion rates and lower consumer costs related to lost wages, productivity, and travel.⁴⁷

In a 2023 survey of ASHA's SLP members, 57% of respondents stated that the number of job openings exceeded the number of applicants, an increase of almost 20% compared to 2021.⁴⁸ Additionally, staffing shortages in a variety of practice settings (e.g., hospitals, skilled nursing facilities) have been well documented. For example, the American Heath Care Association's 2024 staffing shortage report notes that 99% of nursing homes—a practice setting in which SLPs are critical members of multidisciplinary care teams—have open positions. Additionally, 94% of survey respondents indicated they are having trouble hiring staff and nearly half are limiting admissions due to staffing shortages.⁴⁹ Telehealth offers the ability to assist in addressing such shortages and maintain access to care for Medicare beneficiaries across practice settings. Studies have also found that telehealth is particularly beneficial for specific patient populations.⁵⁰

ASHA recommends the following speech-language pathology related evaluation and treatment CPT codes for inclusion in the authorized telehealth services list and offer select clinical scenarios illustrating how these services are safely and effectively provided via telehealth. The codes represent services that SLPs are already providing via telehealth to non-Medicare beneficiaries.

Speech, Language, Communication, and Cognitive Evaluation and Treatment Services The CPT codes ASHA recommends represent core services for the evaluation of treatment of speech, language, voice, cognitive, and communication disorders. These services do not require additional specialized equipment and may be provided safely with the patient at home, when clinically appropriate. Speech-language pathology evaluation and treatment via telehealth, with the patient at home, often has the added benefit of allowing the therapist to incorporate the patient's natural environment into the session, promoting carryover of therapeutic goals and strategies.

Evaluation processes are similar, if not the same, as those used when the evaluation is conducted in person, including results from formal test responses, documentation, and report. Some publishers of standardized assessments have developed guidance about administration of tests via telehealth or validated assessments for administration via telehealth. Research has also compared the validity of in-person and remote assessment protocols, guiding clinicians on test selection.

The visual component of the telehealth service allows the SLP to observe the physical appearance of the patient as well as the patient's physical environment to determine how to establish the plan of care, observe patient compliance, and make necessary modifications to the plan to respond to patient needs.

RECOMMENDED CPT CODES: Speech, Language, and Voice Evaluation and Treatment

- **92507** Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
- **92508** Treatment of speech, language, voice, communication, and/or auditory processing disorder; group
- 92521 Evaluation of speech fluency (eg, stuttering, cluttering)

- **92522** Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria)
- **92523** Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria); with evaluation of language comprehension and expression (eg, receptive and expressive language)
- 92524 Behavioral and qualitative analysis of voice and resonance
- **96105** Assessment of aphasia (includes assessment of expressive and receptive speech and language function, language comprehension, speech production ability, reading, spelling, writing, eg, by Boston Diagnostic Aphasia Examination) with interpretation and report, per hour
- **92626** Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour
- **92627** Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes
- **96125** Standardized cognitive performance testing (eg, Ross Information Processing Assessment) per hour of a qualified health care professional's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report
- 97129 Therapeutic interventions that focus on cognitive function (eg, attention, memory, reasoning, executive function, problem solving, and/or pragmatic functioning) and compensatory strategies to manage the performance of an activity (eg, managing time or schedules, initiating, organizing, and sequencing tasks), direct (one-on-one) patient contact; initial 15 minutes
- **97130** Therapeutic interventions that focus on cognitive function (eg, attention, memory, reasoning, executive function, problem solving, and/or pragmatic functioning) and compensatory strategies to manage the performance of an activity (eg, managing time or schedules, initiating, organizing, and sequencing tasks), direct (one-on-one) patient contact; each additional 15 minutes (List separately in addition to code for primary procedure)

CLINICAL VIGNETTE: Speech Evaluation and Treatment

Following surgical resection of a malignant neoplasm of the tongue, a Medicare beneficiary was discharged from acute care to home with a referral for speech-language pathology services at a hospital-based outpatient specialty clinic for head and neck cancer. The patient lives alone and is immunocompromised from their active adjuvant cancer treatment and requests services via telehealth.

The patient independently logs into the clinic's HIPAA-compliant platform. The SLP completes a non-speech evaluation of the range and accuracy of motion of the patient's tongue, jaw, and lips. The SLP observes their oral structures easily, and the patient adjusts the external web camera to show a close-up view of the healing around their surgical site. The SLP directs the patient to take a measurement of their jaw opening using a template the patient had received via email and printed prior to the session. The SLP assesses the patient's speech intelligibility and comprehensibility using standardized assessments and conversational sampling and administers a cognitive screening tool. They both review a questionnaire emailed from the clinic prior to the appointment, rating the patient's level of communication independence in different

contexts, which includes talking with familiar partners and being understood over the phone. The SLP establishes a plan of care, which the referring physician certifies.

During the following treatment sessions conducted via the clinic's videoconferencing platform, the patient and the SLP collaborate to identify restorative and compensatory strategies for maximizing participation in conversation with the patient's medical team, family, friends, and unfamiliar partners in the community. The telehealth context provides ample opportunity for barrier tasks that reinforce speech strategies, where the patient describes an object or material that the clinician cannot see such as online news articles or household objects. They monitor jaw opening using the printed template from the assessment and notice that range of motion is decreasing, so the SLP modifies the plan of care and contacts the physician for prescription of a handheld tool to stretch the jaw and reduce trismus.

CLINICAL VIGNETTE: Cognitive Evaluation and Treatment

Following a stroke, a Medicare beneficiary was discharged from inpatient rehabilitation to home where they live with their spouse who is the primary caregiver. Six months poststroke, their spouse contacts the physician, noting that the patient struggles with memory and attention, which is impacting their ability to complete activities of daily living. The physician refers the patient to an SLP for evaluation and treatment of cognitive function.

The SLP evaluates the patient using standardized testing validated for telehealth and identifies a moderate impairment of cognitive function. The SLP establishes a plan of care, which the referring physician certifies.

Each week, the patient logs into the videoconferencing platform with minimal help from their spouse. Goals of therapy include increased independence with problem solving and safety/judgment in activities of daily living. The patient works with their SLP on their goals using functional activities via screen share, document viewing, and joint typing activities. The spouse also participates to learn strategies to assist the patient to promote carryover and functional improvements. Because the SLP can use real-world, in-home activities during therapy, the patient retains more information and sees significant improvement.

Caregiver Training Services (CTS)

In the 2025 Medicare Physician Fee Schedule Final Rule, CMS included CTS services provided by SLPs on the authorized telehealth services list on a provisional basis. It noted its rationale for adding these services, including that it would enable stakeholders to develop the research and evidence necessary to add these services permanently given that these services are newly recognized for payment as of 2024. CMS also stated that CTS services were similar to other services on the permanent telehealth services list, such as education and training for patient self-management (CPT codes 98960-98962), self-care/home management training (CPT codes 97535), and caregiver-focused health risk assessment (CPT code 96161). And, in CMS' opinion, all elements of these services may be furnished when using two-way interactive communications technology.

In its comments to CMS in support of this proposal, ASHA agreed with the agency's rationale for inclusion of CTS services as provisionally approved telehealth services. Further, ASHA believes this is critically important because caregivers may have logistical challenges that preclude them from participating in caregiver training in person (e.g., lack of transportation, work schedules, or

disabilities that make traveling to appointments difficult). And accessing caregivers in the natural environment (e.g., the home) may optimize the efficacy and adoption of the training techniques by the caregiver on behalf of the patient. As a result, ASHA is recommending CMS maintain these services on the telehealth services list in 2026.

RECOMMENDED CPT CODES: Caregiver Training Services

- **G0541** Caregiver training in direct care strategies and techniques to support care for patients with ongoing conditions or illness and to reduce complications (including, but not limited to, techniques to prevent decubitus ulcer formation, wound care, and infection control) (without the patient present), face-to-face; initial 30 minutes
- **G0542** Caregiver training in direct care strategies and techniques to support care for patients with ongoing conditions or illness and to reduce complications (including, but not limited to, techniques to prevent decubitus ulcer formation, wound care, and infection control) (without the patient present), face-to-face; each additional 15 minutes (List separately in addition to code for primary service)
- **G0543** Group caregiver training in direct care strategies and techniques to support care for patients with an ongoing condition or illness and to reduce complications (including, but not limited to techniques to prevent decubitus ulcer formation, wound care, and infection control) (without the patient present), face-to-face with multiple sets of caregivers
- 97550 Caregiver training in strategies and techniques to facilitate the patient's functional performance in the home or community (eg, activities of daily living [ADLs], instrumental ADLs [IADLs], transfers, mobility, communication, swallowing, feeding, problem solving, safety practices) (without the patient present), face-to-face; initial 30 minutes
- **97551** each additional 15 minutes (List separately in addition to code for primary procedure)
- **97552** Group caregiver training in strategies and techniques to facilitate the patient's functional performance in the home or community (eg, activities of daily living [ADLs], instrumental ADLs [IADLs], transfers, mobility, communication, swallowing, feeding, problem solving, safety practices) (without the patient present), face to face with multiple sets of caregivers

CLINICAL VIGNETTE: Caregiver Training Services

A patient with a history of multiple sclerosis and diagnosis of pharyngeal dysphagia has difficulties with swallowing. The patient is being discharged from a skilled nursing facility (SNF) to a community dwelling at their adult child's home in a different city. The patient's plan of care included skilled speech-language pathology services to improve swallowing safety with the use of correct positioning and appropriate swallowing strategies. The patient will be discharged on a modified diet of pureed foods with mildly thick liquids. The patient is unable to independently meal prep but can independently communicate dietary needs and meal preferences. Prior to discharge from skilled speech-language pathology services at the SNF, the SLP provides caregiver training to the patient's adult child via telehealth. This session focuses on demonstrating how to modify meals to pureed foods and mildly thick liquid consistencies, at appropriate temperatures. Direct (one-on-one) skills training is also provided to the caregiver for meal set-up, use of cueing to ensure patient's use of safe swallow strategies, and meal set-up to ensure patient's successful participation in mealtimes.

Speech-Generating Device (SGD) Evaluation and Treatment Services

Many patients who need speech-generating augmentative and alternative communication devices qualify for Medicare by virtue of their clinical condition, which might lead to a permanent disability classification or might afflict a patient after age 65. Such conditions include, but are not limited to, neurodegenerative diseases including amyotrophic lateral sclerosis (ALS) or Parkinson's disease. These patients often have mobility and transportation challenges, particularly if they use a wheelchair—as many of them do—use supplemental oxygen or ventilation or have cognitive impairments that require the participation of a caregiver. For some patients, the progression of the disease is rapid, making timely access to an SLP important to ensure the patient can effectively participate in care decisions before they lose their cognitive and communication abilities, or their physical capacity for accessing assistive devices changes. Travel to outpatient appointments for many patients with high support needs is exhausting, which changes the validity of the assessment process and may increase cancelation rates.

Medicare Part B data from 2020 and 2021 indicate that SGD services are "telehealth outliers" compared to other speech-language pathology services because they were provided in excess of 20% of the time; whereas, other speech services were typically provided less than 3% of the time via telehealth. For 2023, SGD services provided via telehealth dropped down to between 4% and 6% based on ASHA's analysis of Medicare Part B utilization data. While this is significantly lower than the years during the public health emergency, this data continues to show that patients and clinicians have recognized and successfully harnessed the power of telehealth for this patient population. Therefore, coverage via telehealth is critically important to maintain timely and efficient access to these services and to uphold quality of care and life for these patient populations.

Current technological capabilities are robust and sufficient to allow for the performance of the services described by these codes from end to end without the need to perform select functions in person. A remote access platform allows SLPs to control the SGD screen, access communication software, and adjust settings.

RECOMMENDED CPT CODES: SGD Evaluation and Treatment

- **92607** Evaluation for prescription for speech-generating augmentative and alternative communication device, face-to-face with the patient; first hour
- **92608** Evaluation for prescription for speech-generating augmentative and alternative communication device, face-to-face with the patient; each additional 30 minutes
- **92609** Therapeutic services for the use of speech-generating device, including programming and modification

CLINICAL VIGNETTE: SGD Evaluation and Treatment

A physician refers a Medicare beneficiary with ALS to an SLP for an SGD. The patient uses a wheelchair and has limited use of their arms, hands, and fingers. The SLP conducts a speech evaluation via telehealth and determines the patient is in urgent need of an SGD because their intelligibility has dropped from 100% to 80% within the last 3 months. Decline with ALS typically continues to progress along the same trajectory and the process of obtaining an SGD, from evaluation to delivery, will be at least 3 months.

During the initial portion of the SGD evaluation, the SLP uses a videoconferencing platform to assess various points of access, including eye gaze and use of a head mouse as the patient is not able to use their hands to write, type, or access a touchscreen. The SLP asks the patient to verbally respond to different stimuli on a grid

on the screen, changing the size of the grid and number of icons and options, observing whether the patient is holding their head steady and relying on visual location or if they move their head and neck in the direction of the target. The SLP observes that the patient is inconsistently moving their head but is able to visually localize to targets on a grid of 64 icons. The patient's spouse confirms that the patient is not moving their legs or naturally initiating other physical movements during the assessment.

The SLP also performs standardized ALS cognitive and behavioral screenings to assess changes in the patient's language, cognition, or behavior that could impact their ability to spell, access prestored messages, use rate enhancement features, and other executive functions important to using an SGD. The SLP also emails the spouse a standardized questionnaire about behavioral changes, which they fill out, takes a picture of, and emails back by replying to the clinician's encrypted email. The SLP also informally screens the patient's vision and hearing. The patient's screens all return normal results. Finally, the SLP explores the patient's specific functional communication needs, such as continuing to work, assisting their son with homework, and communicating with family by phone. The SLP discusses the results of the initial evaluation, next steps for trialing SGD systems, and then forwards a report to the referring physician.

After the evaluation, the SLP contacts three SGD vendors in the patient's county and sets up separate dates for trialing equipment that have the software and access features identified in the assessment. The SLP asks the vendors to bring equipment to trial access methods, including different head mouse options, microlight switches, and eye tracking accessories. Patients with ALS may ultimately require eye tracking access when all other movement is gone so the SLP will trial eye tracking in anticipation of future needs.

As each vendor delivers SGD equipment to the patient's home, they work with the spouse to set up and calibrate the equipment. To determine the optimal system for the patient, the SLP initiates the HIPAA-compliant videoconference platform connected to both a front facing camera on the SGD and side facing camera on the laptop. This allows the clinician to see the patient and the SGD screen from the patient's perspective. The SLP can remotely control the SGD screen, allowing them to access different communication software and adjust settings. The SLP works with the patient to observe their ability to use various accessibility options to interact with the device.

The SLP, patient, and their spouse go through a similar process with each of the devices being trialed. They select an SGD with software the patient can independently customize with options for message banking, one-button phone access, and a loud call chime to signal for help as needed. They identify eye gaze as the optimal access method, as the patient became quickly fatigued during extended trials with a head mouse. They review the treatment plan with goals for operational and strategic competency in using the device with the eye gaze access method and to begin message banking. The SLP forwards the trialing results to the referring physician for a prescription and to affirm the plan of care.

When the selected device arrives, the vendor representative sets up the device in the patient's home and the SLP provides four appointments to remotely train the patient and caregivers on how to set up and customize the communication software to minimize effort and facilitate communication with their SGD. Telehealth appointments for therapeutic services related to the SGD also use videoconferencing technology

connected to the laptop and SGD, allowing the SLP to remotely access the communication software and see the patient from both the front and the side during the clinical interaction.

Swallowing Evaluation and Treatment Services

Estimates indicate that the prevalence of dysphagia may be as high as 22% in adults over the age of 50.⁵¹ Timely access to dysphagia evaluation and treatment services can improve a patient's quality of life and avoid significant adverse health outcomes such as choking and aspiration pneumonia. As a result, ASHA is requesting the addition of swallowing evaluation and treatment to the authorized telehealth services list.

Before sessions, the SLP will review safety protocols with the patient/caregiver/facilitator, as well as provide necessary materials for evaluation or treatment, such as prepackaged texturemodified liquids and solids, and exercise tools. Telehealth services may be provided in the home/natural environment or a satellite clinic/health care facility serving as the originating site. A facilitator, such as a family member/caregiver, may assist under the guidance of the SLP, as needed, including helping with the use of technology and patient positioning.

Clinicians use a videoconferencing platform to conduct sessions. Treatment techniques and processes, including documentation and reporting, are similar, if not the same, as those used when the treatment is provided in person. Telehealth provided in the patient's home also allows the clinician to observe their natural environment and even work with the patient during mealtimes, with other family members/caregivers present. The SLP can also better assess therapeutic carryover through observation and in discussions with family/caregivers.

The visual component of the telehealth service allows the clinician to observe the physical appearance of the patient as well as the patient's physical environment to ensure patient compliance, safety, and necessary modifications to activities as treatment progresses. The SLP may instruct the patient to sit in different positions to allow optimal observation of oral-motor and swallow function from different angles.

RECOMMENDED CPT CODES: Swallowing Evaluation and Treatment

- 92526 Treatment of swallowing dysfunction and/or oral function for feeding
- 92610 Evaluation of oral and pharyngeal swallowing function

CLINICAL VIGNETTE: Swallowing Evaluation

Following a traumatic brain injury resulting in severe cognitive impairment, a Medicare beneficiary was discharged from inpatient rehabilitation to their home, where they live with their daughter. The patient requires significant assistance for transfers and does not tolerate sitting in their wheelchair for more than a few minutes, so they eat meals seated in a recliner with their daughter or another care partner assisting in feeding. All care partners notice that the patient's food intake has been steadily declining. The daughter alerts the physician, who makes a referral to an SLP. They request services via telehealth to accommodate the daughter's work schedule and to assess the patient's swallowing status under conditions that are consistent with how they eat every day rather than an outpatient office seated in a wheelchair or office chair. The SLP provides a description of different food and drink textures before the session via email, which the daughter uses to gather items that represent the most common meals they have at home.

At the time of the assessment, the patient's daughter logs into the SLP's HIPAAcompliant videoconferencing platform. The SLP begins by explaining the process of the clinical swallowing exam, including the kinds of observations that will guide the SLP's decision-making. This supports the daughter's proficiency as a facilitator during the session. They subsequently review the history and questionnaire that the daughter provided via encrypted email prior to the session. The SLP then directs the daughter to offer the patient various textures, observes the patient's response, and asks the daughter to show and describe changes in the patient's respiratory status, arousal, and oral residuals between bites. During the evaluation, both the SLP and the patient's daughter identify that the patient's arousal fluctuates, resulting in a change of trunk position to their weaker side and oral residuals after the swallow on the weaker side. The SLP coaches the patient's daughter to provide more trunk support in the recliner using a pillow and to alternate offering drinks and bites to help maintain arousal. They also discuss adjusting to frequent, small meals rather than three larger meals. The daughter demonstrates understanding of these recommendations and agrees to contact the referring physician and the SLP if intake is not improved by these modifications. The SLP provides a written report to the physician.

CLINICAL VIGNETTE: Swallowing treatment

A Medicare beneficiary sees an SLP for treatment of swallowing difficulties due to moderate dementia. Their physician has certified the swallowing plan of care, as required by Medicare. The patient lives at home with their spouse but has recently been in and out of the hospital and skilled nursing facilities due to complications resulting from a fall. The patient's advanced age and mobility issues make it difficult for them to leave home for appointments. As her dementia progresses one of the most difficult issues is managing their decreasing independence with the oral phase of swallowing, primarily with chewing and moving food or liquid to initiate a swallow. The patient ruminates and holds food in her mouth for several minutes and is having increasing difficulty sequencing to self-feed. A recent instrumental assessment of swallowing did not show aspiration with any consistency, affirming that if the patient is able to initiate a swallow, airway protection is grossly intact.

The SLP uses a videoconferencing platform to continue therapy to address the patient's swallowing difficulties. Because the telehealth session occurs at the patient's home, the SLP can see them in their own environment and even work with them during mealtimes when the spouse and other family members are present. Due to their dementia, the patient does not do well with changes in routine and is more likely to successfully participate in their own home with only family present.

Treatment of swallowing dysfunction may include training on how to use muscles for chewing and swallowing, identifying ways to position the head and body when eating, teaching cognitive sequencing strategies to help swallow better and safer, and making recommendations regarding food texture and consistency to make swallowing easier for the patient. The SLP also provides the family with education and strategies to promote carryover from treatment. Families and caregivers are often actively engaged in strategies to ensure the patient is swallowing safely and effectively at home by helping with exercises, making food and drinks the patient can swallow safely, and keeping track of how much the patient is eating and drinking.

Conclusion

Thank you for your consideration of this request. We look forward to working with CMS to develop a robust telehealth services benefit for patients needing audiologic and speechlanguage pathology services. If you or your staff have any questions, please contact Sarah Warren, MA, ASHA's director for health care policy for Medicare, at swarren@asha.org.

Sincerely,

A. B. Murfield-Clarke

A. B. Mayfield-Clarke, PhD, CCC-SLP 2025 ASHA President

⁵ American Speech-Language-Hearing Association. (2023). *The Value of Telepractice in Speech-Language Pathology*. https://www.asha.org/research/ebp/demonstrating-your-value/value-of-slp-telepractice-services/

⁶ American Speech-Language-Hearing Association. (2023). *Code of Ethics*. https://www.asha.org/Code-of-Ethics/

⁷ U.S. Department of Health and Human Services Office of Inspector General. (2022). *Medicare Telehealth Services During the First Year of the Pandemic: Program Integrity Risks*. <u>https://oig.hhs.gov/oei/reports/OEI-02-20-00720.pdf</u> ⁸ American Speech-Language-Hearing Association. (n.d.). *National Outcomes Measurement System (NOMS)*.

www.asha.org/NOMS

⁹ American Speech-Language-Hearing Association. (n.d.). *National Outcomes Measurement System (NOMS)*. <u>www.asha.org/NOMS</u>

¹⁰ Wesarg, T., Wasowski, A., Skarzynski, H., Ramos, A., Gonzalez, J. C. F., Kyriafinis, G., Junge, F., Novakovich, A., Mauch, H., & Laszig, R. (2010). Remote fitting in Nucleus cochlear implant recipients. *Acta Oto-Laryngologica*, 130(12), 1379–1388. <u>https://doi.org/10.3109/00016489.2010.492480</u>

¹¹ Hughes, M. L., Goehring, J. L., Baudhuin, J. L., Diaz, G. R., Sanford, T., Harpster, R., & Valente, D. L. (2012). Use of telehealth for research and clinical measures in cochlear implant recipients: A validation study. *Journal of Speech, Language, and Hearing Research*, 55(4), 1112–1127. <u>https://doi.org/10.1044/1092-4388(2011/11-0237)</u>

¹² Wasowski, A., Skarzynski, H., Lorens, A., Obrycka, A., Walkowiak, A., Skarzynski, P. H., Wlodarczyk, A. W., & Bruski, L. (2012). The telefitting method used in the national network of teleaudiology: Assessment of quality and cost effectiveness. *Journal of Hearing Science*, *2*(2), 81–85. <u>https://doi.org/10.17430/882767</u>

¹³ National Institute on Deafness and Other Communication Disorders. (2023). *Age-Related Hearing Loss* (*Presbycusis*). <u>https://www.nidcd.nih.gov/health/age-related-hearing-loss</u>

 ¹⁴ Shukla, A., Harper, M., Pedersen, E., Goman, A., Suen, J. J., Price, C., Applebaum, J., Hoyer, M., Lin, F. R., & Reed, N. S. (2020). Hearing Loss, Loneliness, and Social Isolation: A Systematic Review. *Otolaryngology—Head and Neck Surgery*;162(5):622-633. <u>https://aao-hnsfjournals.onlinelibrary.wiley.com/doi/10.1177/0194599820910377</u>
 ¹⁵ Sharma, R. K., Chern, A., & Golub, J. S. (2021). Age-Related Hearing Loss and the Development of Cognitive Impairment and Late-Life Depression: A Scoping Overview. *Seminars in Hearing*. 2021 Feb;42(1):10-25. <u>https://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0041-1725997</u>

¹⁷ Choi, J. S., Adams, M. E., Crimmins, E. M., Lin, F. R., & Ailshire, J. A. (2024). Association between hearing aid use and mortality in adults with hearing loss in the USA: a mortality follow-up study of a cross-sectional cohort. *The Lancet Healthy Longevity*. <u>https://www.thelancet.com/action/showPdf?pii=S2666-7568%2823%2900232-5</u>
 ¹⁸ Cunningham, L. L. & Tucci, D. L. (2017). Hearing Loss in Adults. *The New England Journal of Medicine*, 2017;377:2465–73. https://www.nejm.org/doi/10.1056/NEJMra1616601

¹ Swanepoel, D. W., & Hall, J. W. (2010). A Systematic Review of Telehealth Applications in Audiology. *Telemedicine* and *e-Health*, 16(2), 181-200. <u>http://dx.doi.org/10.1089/tmj.2009.0111</u>

² Grogan-Johnson, S., Alvares, R., Rowan, L., & Creaghead, N. (2010). A pilot study comparing the effectiveness of speech language therapy provided by telemedicine with conventional on-site therapy. *Journal of Telemedicine and Telecare*, 16, 134–139. <u>https://pubmed.ncbi.nlm.nih.gov/20197354/</u>

³ American Speech-Language-Hearing Association. (2023). The Value of Telepractice in Speech-Language

Pathology. https://www.asha.org/research/ebp/demonstrating-your-value/value-of-slp-telepractice-services/ ⁴ Grogan-Johnson, S., Alvares, R., Rowan, L., & Creaghead, N. (2010). A pilot study comparing the effectiveness of speech language therapy provided by telemedicine with conventional on-site therapy. *Journal of Telemedicine and Telecare*, 16, 134–139. <u>https://pubmed.ncbi.nlm.nih.gov/20197354/</u>

¹⁹ National Institute on Deafness and Other Communication Disorders. (2024). *Quick Statistics About Hearing, Balance, & Dizziness*. <u>https://www.nidcd.nih.gov/health/statistics/quick-statistics-hearing</u>

²⁰ American Speech-Language-Hearing Association. (2024). *Audiology Survey Report: Workforce Trends, 2016–* 2023. https://www.asha.org/siteassets/surveys/2023-audiology-survey-workforce-trends.pdf

²¹ Swanepoel, D. W. & Hall, J. W. (2010). A Systematic Review of Telehealth Applications in Audiology. *Telemedicine* and e-Health, 16(2).181-200. <u>http://dx.doi.org/10.1089/tmj.2009.0111</u>

²² Bush, M. L., Thompson, R., Irungu, C., & Ayugi, J. (2016). The Role of Telemedicine in Auditory Rehabilitation: A Systematic Review. *Otology & Neurotology, 37*(10), 1466–1474. https://doi.org/10.1097%2FMAO.0000000000001236
 ²³ Wesarg, T., Wasowski, A., Skarzynski, H., Ramos, A., Gonzalez, J. C. F., Kyriafinis, G., Junge, F., Novakovich, A., Mauch, H., & Laszig, R. (2010). Remote fitting in Nucleus cochlear implant recipients. *Acta Oto-Laryngologica, 130*(12), 1379–1388. https://doi.org/10.3109/00016489.2010.492480

²⁴ Ramos, A., Rodríguez, C., Martinez-Beneyto, P., Perez, D., Gault, A., Falcon, J. C., & Boyle, P. (2009). Use of telemedicine in the remote programming of cochlear implants. *Acta Oto-Laryngologica, 129*(5), 533–540. https://doi.org/10.1080/00016480802294369

²⁵ Hughes, M. L., Goehring, J. L., Baudhuin, J. L., Diaz, G. R., Sanford, T., Harpster, R., & Valente, D. L. (2012). Use of Telehealth for Research and Clinical Measures in Cochlear Implant Recipients: A Validation Study. *Journal of Speech, Language, and Hearing Research, 55*(4), 1112–1127. <u>https://doi.org/10.1044/1092-4388(2011/11-0237)</u>
 ²⁶ Goehring, J. L. & Hughes, M. L. (2017). Measuring Sound-Processor Threshold Levels for Pediatric Cochlear Implant Recipients Using Conditioned Play Audiometry via Telepractice. *Journal of Speech, Language, and Hearing Research, 60*(3), 732–740. <u>https://doi.org/10.1044/2016_JSLHR-H-16-0184</u>

²⁷ Hughes, M. L., Goehring, J. L., Sevier, J. D., & Choi, S. (2018). Measuring Sound-Processor Thresholds for Pediatric Cochlear Implant Recipients Using Visual Reinforcement Audiometry via Telepractice. *Journal of Speech, Language, and Hearing Research, 61*(8), 2115–2125. <u>https://doi.org/10.1044/2018_JSLHR-H-17-0458</u>

²⁸ Schepers, K., Steinhoff, H. J., Ebenhoch, H., Böck, K., Bauer, K., Rupprecht, L., Möltner, A., Morettini, S., & Hagen, R. (2019). Remote programming of cochlear implants in users of all ages. *Acta Oto-Laryngologica*, *139*(3), 251–257. https://doi.org/10.1080/00016489.2018.1554264

²⁹ Slager, H. K., Jensen, J., Kozlowski, K., Teagle, H., Park, L. R., Biever, A., & Mears, M. (2019). Remote Programming of Cochlear Implants. *Otology & Neurotology, 40*(3), e260–e266.

https://doi.org/10.1097%2FMAO.000000000002119

³⁰ Eikelboom, R. H., Jayakody, D. M., Swanepoel, D. W., Chang, S., & Atlas, M. D. (2014). Validation of remote mapping of cochlear implants. *Journal of Telemedicine and Telecare, 20*(4), 171–177. https://doi.org/10.1177/1357633X14529234

³¹ National Institute on Deafness and Other Communication Disorders. (2021). *Quick Statistics About Hearing, Balance, & Dizziness.* https://www.nidcd.nih.gov/health/statistics/quick-statistics-hearing

³² Sorkin, D.L. (2013). Cochlear implantation in the world's largest medical device market: Utilization and awareness of cochlear implants in the United States. *Cochlear Implants International,* 2013;14 Suppl 1(Suppl 1): S4–12. https://www.tandfonline.com/doi/full/10.1179/1467010013Z.0000000076

³³ Sorkin, D.L. & Buchman, C.A. (2016) Cochlear Implant Access in Six Developed Countries. *Otology & Neurotology*, 2016;37:e161–4. <u>https://journals.lww.com/otology-</u>

neurotology/fulltext/2016/02000/cochlear_implant_access_in_six_developed_countries.37.aspx

³⁴ iData Research Inc. (2010). US Market for Hearing Aids and Audiology Devices. www.idataresearch.net

³⁵ iData Research Inc. (2016):1–378. US Market Report Suite for Hearing Devices. <u>www.idataresearch.net</u>

³⁶ Nassiri, A. M., Sorkin, D. L., & Carlson, M. L. (2021). Current Estimates of Cochlear Implant Utilization in the United States. *American Cochlear Implant Alliance 2021*. Virtual Conference 2021.

³⁷ iData Research Inc. (2015) US Market for Hearing Aids and Audiology Devices. <u>www.idataresearch.net</u>

³⁸ Fitzpatrick, E. M., Ham, J., Whittingham, J. (2015). Pediatric Cochlear Implantation: Why Do Children Receive Implants Late? *Ear and Hearing*, 2015;36:688–94. <u>https://journals.lww.com/ear-</u>

hearing/fulltext/2015/11000/pediatric cochlear implantation why do children.6.aspx ³⁹ Brems, C., Johnson, M. E., Warner, T. D., & Roberts, L. W. (2006). Barriers to healthcare as reported by rural and urban interprofessional providers. *Journal of Interprofessional Care*, 20:105–18.

https://www.tandfonline.com/doi/full/10.1080/13561820600622208

⁴⁰ Elpers, J., Lester, C., Shinn, J. B., & Bush, M. L. (2016). Rural Family Perspectives and Experiences with Early Infant Hearing Detection and Intervention: A Qualitative Study. *Journal of Community Health*, 2016;41:226–33. https://link.springer.com/article/10.1007/s10900-015-0086-1

⁴¹ Shayman, C. S., Ha, Y. M., Raz, Y., & Hullar, T. E. (2019). Geographic Disparities in US Veterans' Access to Cochlear Implant Care Within the Veterans Health Administration System. *JAMA Otolaryngology—Head & Neck Surgery*, 2019;145:889–9. <u>https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/2740683</u>

⁴² Noblitt, B., Alfonso, K. P., Adkins, M., & Bush, M. L. (2018). Barriers to Rehabilitation Care in Pediatric Cochlear Implant Recipients. *Otology & Neurotology*, 39:e307–e13. <u>https://journals.lww.com/otology-neurotology/abstract/2018/06000/barriers to rehabilitation care in pediatric.12.aspx</u>

⁴³ Barnett, M., Hixon, B., Okwiri, N., Irungu, C., Ayugi, J., Thompson, R., Shinn, J. B., & Bush, M. L. (2017). Factors involved in access and utilization of adult hearing healthcare: A systematic review. *The Laryngoscope*, 2017;127:1187–94. https://onlinelibrary.wiley.com/doi/10.1002/lary.26234

⁴⁴ American Speech-Language-Hearing Association. (2023). *The Value of Telepractice in Speech-Language Pathology*. https://www.asha.org/research/ebp/demonstrating-your-value/value-of-slp-telepractice-services
⁴⁵ Ibid.

 ⁴⁶ Cutchin, G. M., Shelly, S., Petty, B., van Leer, E., Tripp, R. M., Klein, A. M., & Gillespie, A. I. A Comparison of Voice Therapy Attendance Rates Between In-Person and Telepractice. *American Journal of Speech-Language Pathology*, Volume 32, Number 3, Pages 1154-1164. <u>https://doi.org/10.1044/2022 AJSLP-22-00113</u>
 ⁴⁷ Ibid.

⁴⁸ American Speech-Language-Hearing Association. (2023). *ASHA SLP Health Care 2023 Survey*. <u>https://www.asha.org/siteassets/surveys/2023-slp-hc-survey-workforce.pdf</u>

⁴⁹ American Health Care Association. (2024). State of the Nursing Home Sector: Survey of 441 nursing home providers highlights persistent staffing and economic crisis. <u>https://www.ahcancal.org/News-and-Communications/Fact-Sheets/AHCA%20State%20of%20the%20Sector%202024.pdf</u>

⁵⁰ Taiebine, M. & Keegan, L. C. (2024). Telepractice for bilingual and multilingual people with aphasia: a scoping review. *Aphasiology*, 1–23. <u>https://doi.org/10.1080/02687038.2024.2373434</u>

⁵¹ American Speech-Language-Hearing Association. (n.d.). *Adult Dysphagia* (Practice Portal). https://www.asha.org/Practice-Portal/Clinical-Topics/Adult-Dysphagia/