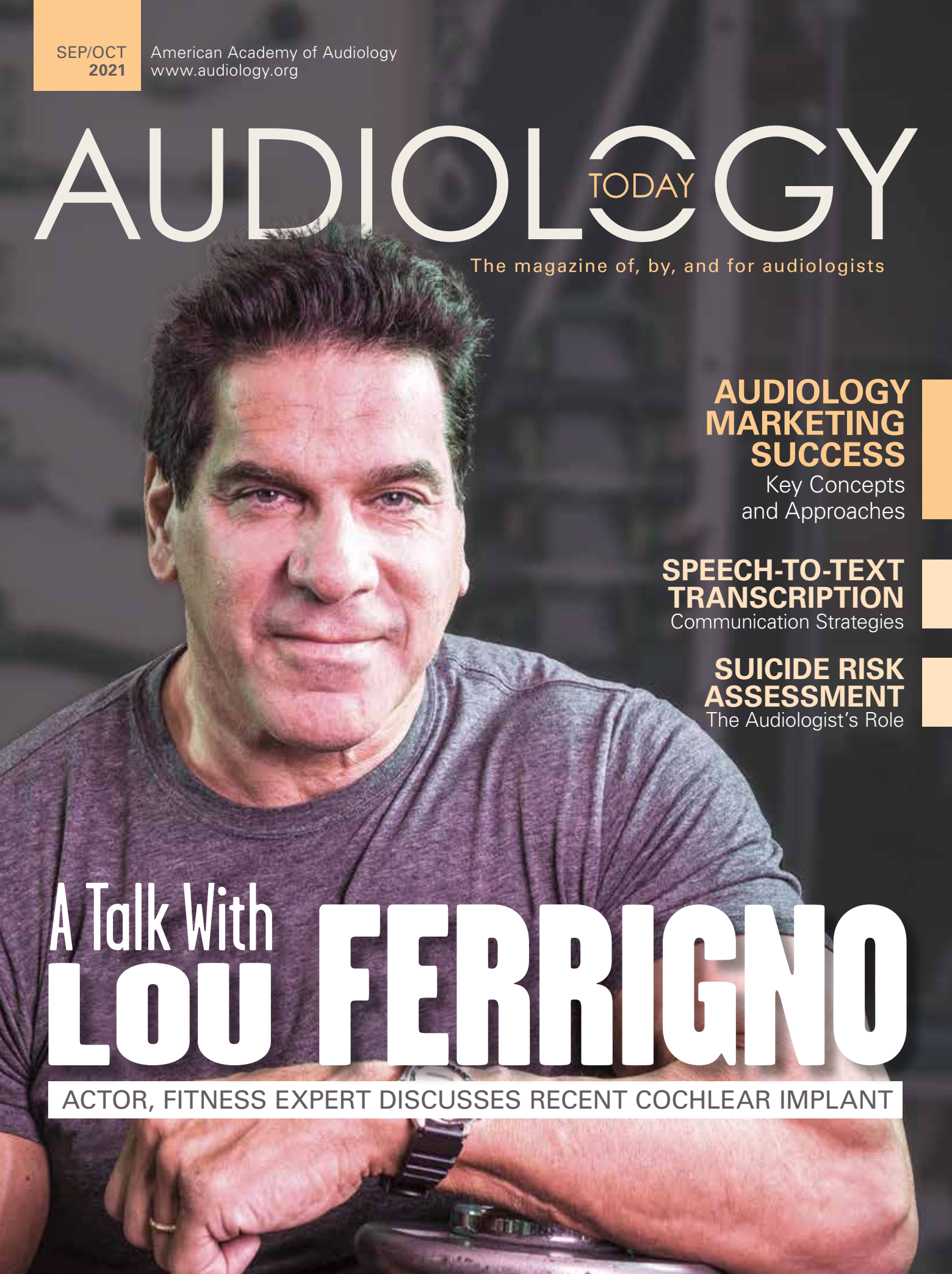
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The magazine of, by, and for audiologists



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Key Concepts and Approaches

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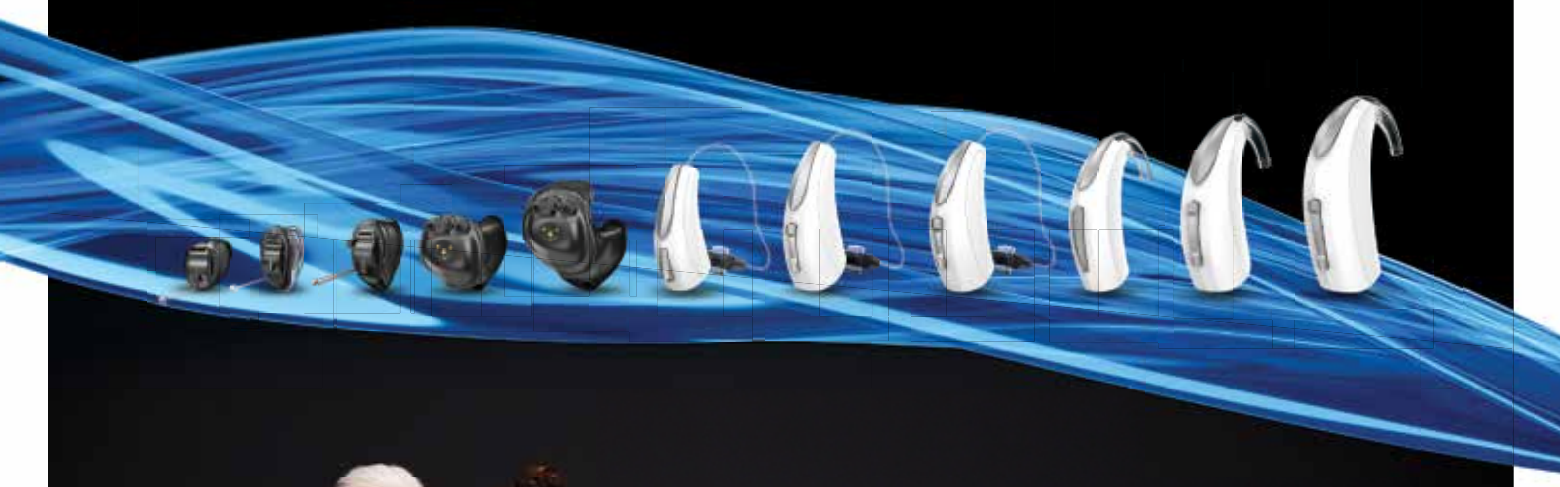
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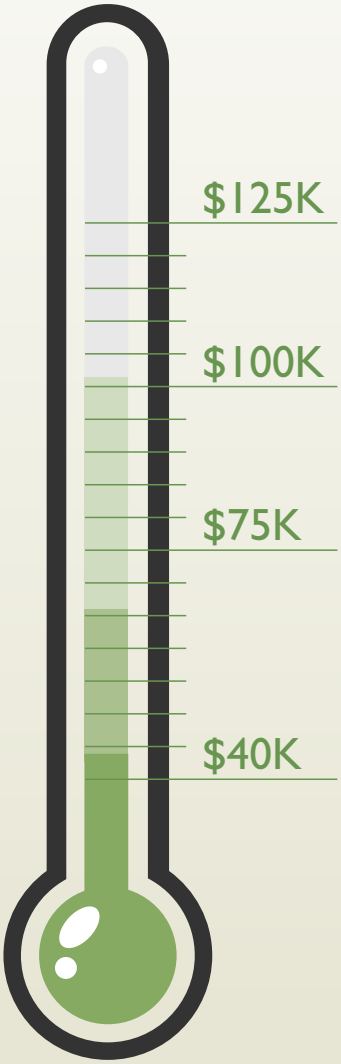
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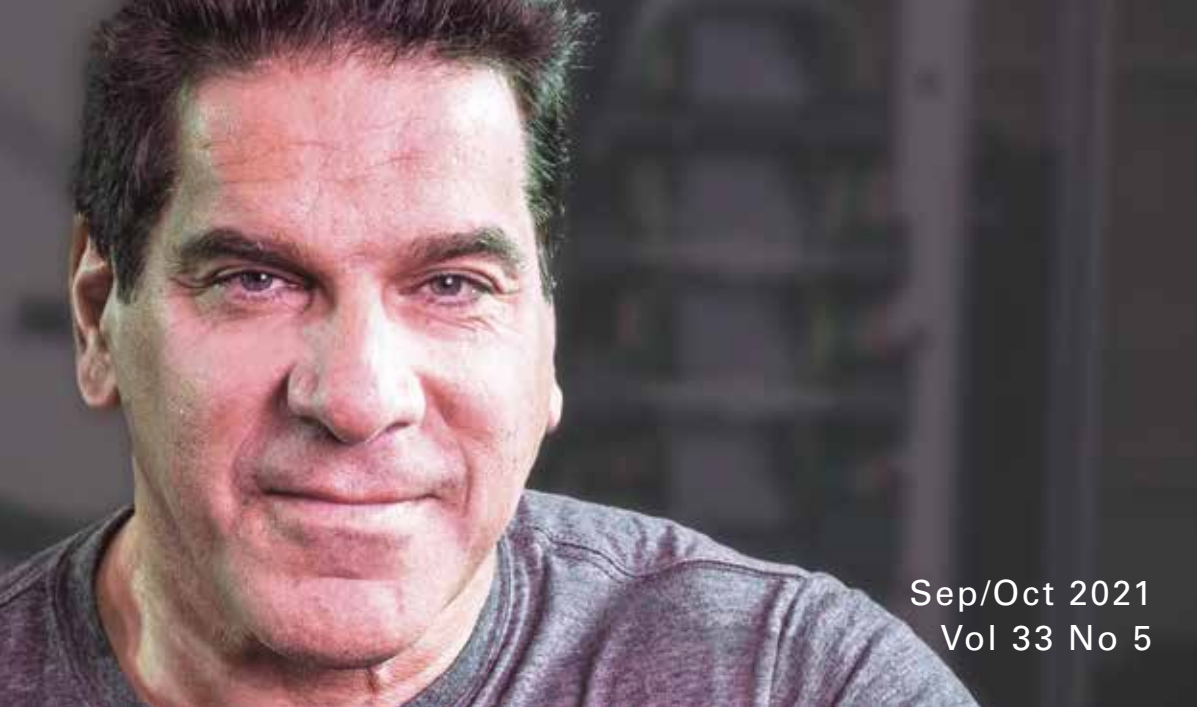
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Photograph provided by Lou Ferrigno and Cochlear Americas.

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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.

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Erin C. Schafer, PhD | dr.erinschafer@gmail.com

Associate Editors
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Editor Emeritus
Jerry Northern, PhD

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Managing Editor
Kathie Felix

Art Direction
Suzanne Chanesman

Marketing and Communications Specialist
Kiersten Valko

Advertising Sales
Eric Gershowitz | eric.gershowitz@mci-group.com | 410-584-1938

AMERICAN ACADEMY OF AUDIOLOGY OFFICE

Main Office
11480 Commerce Park Drive, Suite 220, Reston, VA 20191
Phone: 800-AAA-2336 | Fax: 703-790-8631

AMERICAN ACADEMY OF AUDIOLOGY MANAGEMENT

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Patrick E. Gallagher, MBA
Executive Director
American Academy of Audiology
pgallagher@audiology.org

Lily Rollins
President, Student Academy of Audiology
lilyrollins.saa@gmail.com

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New considerations for recommending a cochlear implant evaluation

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 outcomes[1] 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, 2kHz) and speech understanding less than or equal to 60%,[2] referral for a cochlear implant evaluation should be pursued.

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.[3] 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 cannot 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.

Bimodal hearing



When to consider a cochlear implant evaluation for adults*

Audibility Pure Tone Average (0.5, 1k, 2 kHz)	Greater than or equal to **60** dB[2] (in the better ear)
Speech Understanding Unaided Word Recognition Score	Less than or equal to **60**%[2] (in the better ear)

Cochlear recently hosted a course, *Treating Hearing Loss in Adults: A Continuum of Care*, presented by Jan Gilden, M.A. and Jerome Evans, Au.D. This course provided an overview of cochlear implant technology and focused on understanding referral criteria, candidacy and effective counseling for potential candidates. If you are interested in watching the recording, please visit: **https://eaudiology.audiology.org/industry_solutions**

To learn more about when to refer for a cochlear implant evaluation, visit: **www.cochlear.us/when-to-refer**

1. Derinsu U, Yüksel M, Geçici CR, Çiprut A, Akdeniz E. Effects of residual speech and auditory deprivation on speech perception of adult cochlear implant recipients. Auris Nasus Larynx. 2019 Feb;46(1):58-63. doi: 10.1016/j.anl.2018.06.006. Epub 2018 Jun 23. PMID: 29945747.
2. Zwolan TA, Schvartz-Leyzac KC, Pleasant T. Development of a 60/60 guideline for referring adults for a traditional Cochlear implant candidacy evaluation. Otol Neurotol 2020;41:895-900.
3. Gifford RH, Dorman MF, McKarns SA, Spahr AJ. Combined electric and contralateral acoustic hearing: Word and sentence recognition with bimodal hearing. Journal of Speech, Language, and Hearing Research. 2007 Aug 1;50(4):835-43.

* 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.

This content is meant for professional use. If you are a consumer, please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information. Views expressed are those of the individual. Consult your health professional to determine if you are a candidate for Cochlear technology.

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CAM-MK-PR-552 ISS1 JUL21

Strengthening Your Commitment to Your Audiology Community

> **You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.**
>
> *— Jane Goodall (Quotlr.com, 2021)*



I recently attended a church service for the celebration of the life of a man I have known for more than 25 years. As I listened to his family's memories, I felt comfort in hearing familiar tales. He and his wife, who also passed away earlier this year, were adventurous, thoughtful, kind, witty, energetic, compassionate, and committed.

They were doers and had a positive impact on the world around them. They raised a wonderful family and traveled widely. He had a long and successful career and was a Veteran who served in Korea. They enjoyed square dancing and were active in their church.

With the many rich layers of their lives, I found it particularly meaningful that the church minister elected to recount a story in which I had the privilege to participate, about how this gentleman had advocated for, and implemented, a loop system in his church. Due to his difficulty understanding in large venues and his personal experience of the benefits of the telecoil in his hearing devices, he worked tirelessly to provide solutions for others in his community who are d/Deaf or hard of hearing.

As I reflected on the many contributions made by this gentleman, I considered specifically how his advocacy efforts had resulted in the awareness of challenges experienced by those with hearing difficulties and the many solutions available to help them be more engaged and involved in their communities.

Being reminded of his efforts to provide hearing access for all members of his congregation strengthened my commitment to ensure that all people who are d/Deaf or

hard of hearing have access to the knowledgeable, professional guidance necessary to assist them through their hearing and lifestyle needs, to identify the most appropriate solutions, and to support them on their path to optimal hearing access.

To ensure that all patients who are d/Deaf or hard of hearing have access to the diagnostic and treatment options most appropriate to meet their individual needs, we must all work to pass the Medicare Audiologists Access and Services Act (MAASA).

Jane Goodall noted that "the greatest danger to our future is apathy" (Quotlr.com, 2021). Don't allow apathy to endanger the future—visit the Advocacy section of the Academy website and use the tools provided in the Legislative Action Center (www.audiology.org/advocacy/legislative-action-center/) to positively impact access to hearing-health care. Now is the time for action. *Each* audiologist must join the effort to educate and advocate in the interest of the patients we serve. We *can* effect positive change if we all make our voices heard.

Every individual matters. Every individual has a role to play. Every individual makes a difference.

— Jane Goodall (Quotlr.com, 2021)



Angela Shoup, PhD
President
American Academy of Audiology

Reference

Quotlr.com. (2021) Jane Goodall quotes. https://quotlr.com/author/jane-goodall (accessed July 23, 2021).



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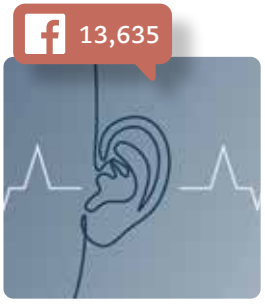
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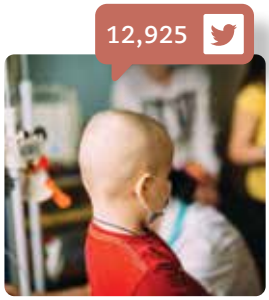


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Only about 30 percent of practicing and dispensing audiologists perform real-ear measurements regularly. New professionals can move these numbers to the other end of the spectrum.

Published on August 12

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Published on August 5

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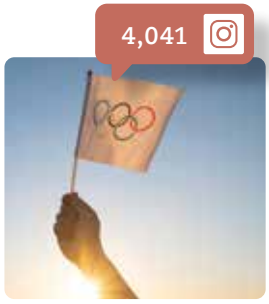


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Looking back to 1946: Clinical audiology was formalized as World War II progressed to assist the many young service members returning home who required rehabilitation.

Published on August 10

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A recent and abrupt departure from competition due to "the twisties" demonstrates how critical the integration of vestibular and spatial awareness is, in addition to physical strength.

Published on August 3

www.instagram.com/academyofaud

September 19–25

Awareness Event

Balance Awareness Week

www.audiology.org/practice-resources/practice-management/public-awareness/balance-awareness-week

September 22

Awareness Event

Falls Prevention Awareness Day

https://nationaltoday.com/falls-prevention-awareness-day

October 6

Meeting

British Society of Audiology Annual Conference: Innovation Through Adversity

Sheffield, United Kingdom

www.thebsa.org.uk/bsa-annual-conference-2021

October 14

Virtual Event

Academy Political Action Committee Paint and Sip

www.audiology.org/event/political-action-committee-virtual-paint-and-sip

October 25–27

Meeting

Academy of Doctors of Audiology AuDacity Convention 2021

Portland, Oregon

www.audiologist.org/audacity/conference-agenda

October 28

Virtual Event

Academy Foundation FUN-raiser Trivia Night

www.audiology.org/event/trivia-night-a-aaa-foundation-fun-raiser

A Talk With LOU FERRIGNO

ACTOR, FITNESS EXPERT DISCUSSES RECENT COCHLEAR IMPLANT

BY DAVID FABRY

As I discovered more about Lou, I found myself instantly rooting for him in his bodybuilding journey and learned that he had lost much of his hearing as a child. Over the years, I have had the opportunity to meet Lou on several occasions and was honored to catch up with him during Better Hearing Month to discuss his recent cochlear implant surgery.

Many people may know Lou Ferrigno from his iconic title role in the television series "The Incredible Hulk" from the late 1970s. In the show, Dr. David Banner (Bill Bixby) travels across the United States and finds himself in positions where he helps others in need despite a terrible secret: because of a laboratory experiment, he transforms into an enormous, savage, incredibly strong alter-ego named the Hulk (Ferrigno) during times of extreme anger or stress. Banner's inner struggle paralleled the dilemmas of the people he encountered on the road and the plot line focused on various ways that the Hulk manifested itself in everyone.

Although I watched the show when it was broadcast from 1978–1982, my familiarity with Ferrigno began earlier, when he co-starred with Arnold Schwarzenegger in the 1977 bodybuilding documentary "Pumping Iron." I was immediately struck by the contrast in personalities between Schwarzenegger and Ferrigno. The former was

PHOTOGRAPH PROVIDED BY LOU FERRIGNO AND COCHLEAR AMERICAS.





A young Lou Ferrigno with his childhood hearing aids.

PHOTOGRAPH PROVIDED BY LOU FERRIGNO AND COCHLEAR AMERICAS.

extroverted, aggressive, and brash and he trained at Santa Monica's Muscle Beach, while the quiet and reserved Ferrigno trained privately with his father in a poorly lit basement gym.

I found myself instantly rooting for Lou and learned in the movie that he had lost much of his hearing as a child. Although well before I decided to become an audiologist, it was one of my earliest exposures to the challenges faced by those with severe-to-profound hearing loss.

Over the years, I have had the opportunity to meet Lou on several occasions and was honored to catch up with him during Better Hearing Month (in May) to discuss his recent cochlear implant surgery.

David Fabry (Q): *Thank you for taking the time out of your schedule during Better Hearing Month to discuss your hearing journey and that you received a cochlear implant for your left ear just a couple months ago.*

Lou Ferrigno (A): Yes, that is correct.

Q: *I watched your cochlear implant activation video on YouTube (https://youtu.be/_yfHm31P98Q), and I must say, it appeared to be quite an emotional experience for you. Can you describe what it felt like when the device was turned on for the first time?*

A: Well, you have to remember that, after the surgery, you can't hear anything until you get activated. For me, because of COVID, it was nearly five weeks before they activated the device for the first time. At that time, it went from a silent world to a whole different sound.

It is like my whole world just opened up. Initially, I was hearing bells and chimes and sounds, but I was amazed how, over the period of a few weeks, the brain can understand the words. It was such a breakthrough when it comes to clarity. I never heard that clearly before with hearing aids. I can appreciate how a hearing-"normal" person hears for the "s" sound and it is also helping my own diction, too.

Q: *I would like to explore that a little bit. First, you were identified with hearing loss and fitted with a hearing aid at age three or four, correct?*

A: I would say four and a half or five years of age. I was fitted with the old-fashioned hearing aids with the strap on the chest and that button sticking out with the wire. It made me feel self-conscious, but I had no choice because the doctor told my parents

that I had a hearing loss. I was surprised that my parents did not know until the age of four because they would clap their hands and I would not respond. I remember my mother breaking down in tears when she took me for the hearing aid fitting and they fitted me with the hearing aids.

Back then, people did not know what hearing aids were or understand them like they do today. I felt like a freak at the time, but I realized that I was the only person who could help myself. Being rejected and dealing with the speech issues, I had a long uphill fight that gave me a chance to find my passion, which became bodybuilding. It changed my life because I realized that nobody else was going to pat me on the back and help me. I realized that I had to act for myself.

Q: *I understand that you are turning 70 this year. A lot of younger audiologists may not realize that it was not that long ago that people with significant hearing loss were referred to as "Deaf and mute" or worse, "deaf and dumb." It is so painful to even say those words; I can only imagine how it made you feel.*

A: The big factor was that, when I was born with this hearing loss, I was rejected by my father because he did not have the "perfect" son. He used to say to me, "If you had your hearing, you could be a great athlete; you could be a police officer." He instilled all that negativity. I would carry his pain the whole time because there were kids that made fun of me. They beat me up and called me names.

> I perfected my personal power in my body. This was my opportunity to do something with my ears.

One day, I felt like I had to do something about it. I became an avid comic book reader. I liked to read about the Hulk, Spiderman, and Superman because many kids are obsessed

with superheroes. I used that power issue to get involved in bodybuilding because I knew that the more I built my body and physique, the more respect I would get.

Over time, that changed everything. Now, I am the kind of guy that, if anybody says I cannot do something because I have a hearing loss, it motivates me to work hard to achieve it anyway. I am glad to be an example for people with hearing loss today. There is no shame to hearing loss; you can improve your hearing with a cochlear implant. It has been a life changer for me!

Q: *You've been such a strong advocate for those with hearing loss over the years. As a professional working in this field, I am so grateful to you for sharing your story and serving as a role model for children and adults with hearing loss. I think you have turned that into your superpower. You mentioned that you now hear some of those higher-pitched sounds better and that this also helped with your speech* production.

A: Yes, growing up, one of the biggest obstacles for me was dealing with the speech issues. I learned to speak by the feeling of my tongue—that's phonetics. The thing that I like about the cochlear implant is that I do not have to remind myself about different words because the implant helps me to hear my own voice more naturally.





Lou Ferrigno with his family at the E! Entertainment Television Summer Splash Event held at the Roosevelt Hotel in Hollywood, California, on August 1, 2005.

Q: *Actually, I know that it is a process that will take time, but I can hear a difference in your voice already.*

A: At the time of the initial activation, my hearing clarity was maybe 18 or 19 percent. In only like seven weeks, the words started to sound much clearer and I was up to around 65 percent.

And you can tell from the way that I'm speaking now, I can hear the different "s" sounds that I never heard before. People used to say that I had a slight lisp, but that is going to be gone soon because I have been working hard on my diction.

The interesting thing that people must know is that, when they get a cochlear implant, it is almost like it is like using new gym equipment. Instead of your body, however, you are training the "ear muscle."

Q: *Are you wearing a hearing aid on the right ear currently?*

A: Yes. I have always had a greater problem with my left ear, but I am starting to lose more hearing in my right ear, as well. Maybe in a year's time, I will get an implant on the right ear.

Q: *You talk about committing to rehabilitation (or habilitation) with your implant to appreciate and perceive sounds differently from the way you heard them acoustically. This probably seems easy for you, as someone who has had the discipline to train for competitions that ended up with you winning the Mr. America and Mr. Universe bodybuilding competitions. Can you describe how the process has been for you?*

A: Sometimes it takes people six to nine months, but the way I have been working at it, for me, it has been a matter of five or six weeks. Like you mentioned, it depends on the person. But people must know that, when you get a cochlear implant, although everybody gets it activated, everyone's experience during the transition is a little different.

For me, remember, I have had a profound hearing loss my whole life and I have never heard the way that I hear now. I wish I could have done this sooner, but I know it takes time, and the more you work at it, the more beneficial it is to you. I say that, in a year's time, I might have my word discrimination at 85 to 87 percent.

Q: *I love how specific you are at setting your goals, and it provides insight into your mindset regarding this whole process. It is interesting to examine people's journeys and, although you say that you wish you had received the implant sooner, maybe you are just where you*

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needed to be. The improvements in cochlear implant technology have been dramatic in recent years, and it is remarkable that you are doing so well.

It is about maximizing the results to be the best I can hear and the best I can speak.

A: It is amazing because I originally thought that a cochlear implant would have a lot of limitations. A friend of mine, who has similar problems, did a lot of research prior to being implanted. Now he has word discrimination of 98 percent, but he didn't have as much hearing loss as I did for as long of a time. His decision, however, gave me the confidence to have a cochlear implant because, if he has done so well, why can't I? It was the best decision I ever made.

Q: *Yes, although you had a role model in your friend, it can be a challenging decision for many people to proceed with the surgery. Unlike hearing aids, you cannot simply return the devices if you do not like them. What finally led you to the decision to move forward? Was it made worse because of COVID, when everyone was wearing face masks, and you were losing audibility and lipreading cues?*

A: Well, during COVID, and with a lot of people wearing the masks, it almost smothers their speech. It is frustrating because you can't easily ask people to lower their mask to see their lips, but it made it very difficult to communicate.

I realized during COVID, and thinking of my friend, that I should take the step. Do not get me wrong; I was scared to death. I did not know what was going to happen. I was not sure if I would be a candidate and I also hoped that nothing would go wrong. But it was better than I expected and what I like about this most of all is the improvement in my diction.

As an actor, whether it was a stage play or film, I had

producers tell me that I had a speech impediment. Some would try to put me down for it. I have dealt with that for my whole life. Although I perfected my personal power in my body, this was my opportunity to do something with my ears. This opportunity is like icing on the cake.

Q: *Absolutely. May is Better Hearing Month and people are finally starting to realize that better hearing is linked to overall health and well-being. I know that you are familiar with Helen Keller, who had a profound loss of both vision and hearing. With tremendous respect for the Deaf community, Keller said, "Blindness cuts us off from things, but deafness cuts us off from people." She also stated that her greatest challenge was the "acute disappointment in not being able to speak normally."*

A: I can relate to this. Because of my hearing loss, I have always had to ask for more power from my hearing aids. The best hearing aid in the world is not going to give me the clarity that I hear now because sometimes more power affects clarity. Hearing aids help a lot of people, but the cochlear implant improved speech clarity in ways that were not possible from hearing aids.

Q: *Have you started streaming audio directly from your smartphone to your implant yet?*

A: I am listening to TED Talks and I am doing all the different training apps. There are ones where you listen to four words and pick the one that was said. Others have environmental sounds or the names of animals. It is almost like working out, but you are training the ear. I am amazed at how much I am hearing and the way that it works with my brain.



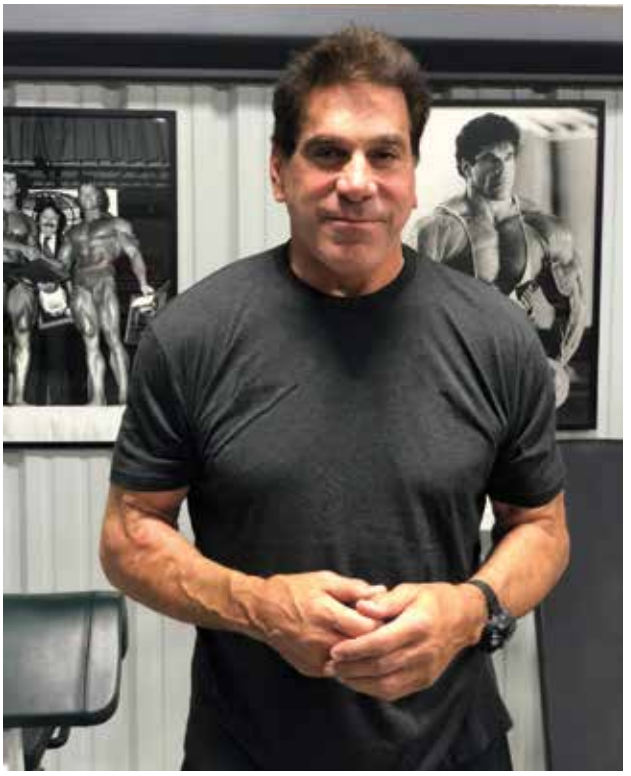
Q: *It is incredible to think that, during my career, we used to consider the operation a success if implant users could identify a familiar talker. Now you are telling me that you are streaming TED Talks from your smartphone to your device. No doubt, however, that this is due to your dedication and focus on training.*

A: I really could not fathom before how well it would work and how quickly I would feel results. I do not dread the training at all. In fact, it is exciting. But you are right, I am training hard.

Q: *What does your family say? I know you and your wife, Carla, have been married for 41 years. What does she say? And what do your children say?*

A: They are amazed that I can hear others saying words that I could not hear before. One time, I had my wife stand 50 feet back from me and speak very low. I was able to hear all the words that she said. Now,

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PHOTOGRAPH PROVIDED BY LOU FERRIGNO AND COCHLEAR AMERICAS.

I keep telling her to close the refrigerator door because the buzzing sound drives me insane! Before, I could not even hear it. And this is just one ear. Imagine what will happen when I have both ears implanted!

Q: *Some research has suggested that, if you have a way to provide acoustic input, either by wearing a hearing aid in the non-implanted ear or by preserving residual hearing in the implanted ear (if possible), that music sounds better. Are you listening to music and does music sound better when you have the hearing aid in your right ear?*

A: I use both but, most of the time, I am doing the exercises with just the implant. Music does sound much more natural to me; it is much more relaxing, especially when I'm streaming directly to the implant from my iPhone.

Q: *What's next? I know that you have a movie (Guest House) that came out in 2020. What is on the horizon?*

A: What I am excited about, when I go back to filming in about a month, is to see the changes in how other people sound and the way that I sound.

Q: *I cannot wait to see—and hear—how that goes.*

A: To summarize the whole thing, it is like your body but, instead of training with the machines to build your muscles, you are training your "ear muscles" and your brain. But it must come from you. The effort you put in is directly proportionate to what you get out. To me, it is about maximizing the result to be the best I can hear and the best I can speak. That is the goal.

I think that really is your superpower. Like the Hulk, you found a way to harness the anger and frustration from being teased about your speech and hearing as a kid into a powerful force for effective communication. Thank you for your time today and sharing your powerful story with our readers.

David Fabry, PhD, is the chief innovation officer at Starkey. He is an Academy past president and former board member. He currently serves on the board of the American Auditory Society. Dr. Fabry proudly served as the former editor-in-chief of Audiology Today magazine. He has no conflicts of interest with Lou Ferrigno or Cochlear Corporation.

New Interactive Performance Calculators Can Help You Set Goals for Growth

By Randy Baldwin

Measuring your practice performance can provide important information that can help you objectively identify team strengths and areas that may need improvement. When you consider that each prospective patient could potentially generate several thousand dollars in revenue, it becomes critically important to understand how well your practice is fitting those who could benefit with hearing devices—as well as how your average ticket compares to regional price points. Once you review current performance, you can set new target goals and estimate potential revenue gains.

To help facilitate this process, CareCredit has created FREE interactive Performance Calculators. These customizable calculators can help you evaluate your practice data and project potential revenue increases based on enhancing both your capture rate and average ticket sale. Simply enter your practice data into the appropriate fields to determine potential outcomes.

Practices should consider illustrating the total out-of-pocket cost as an estimated monthly payment using financing options with the CareCredit credit card. From patients adhering to a monthly budget to those who appreciate smart financial resources, promotional financing is an appreciated value and convenience for consumers.

Access the online Performance Calculators at https://gosyf.com/3ecQLcC.

For more resources to help grow your practice, visit www.carecredit.com/soundstrategies.

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Randy Baldwin is the vice president of marketing for CareCredit.



Intelligible Sound Anywhere for Equitable and Effective Learning

By Demitrius Handelih

Experience the power of effortless communication with FrontRow, the premier K–12 education communication platform and classroom audio-distribution system.

With FrontRow, all students can hear instruction better so their learning can improve, regardless of where they are in the room or whether they are a mainstream student, a student using an assistive listening device, or a student learning English as a second language.

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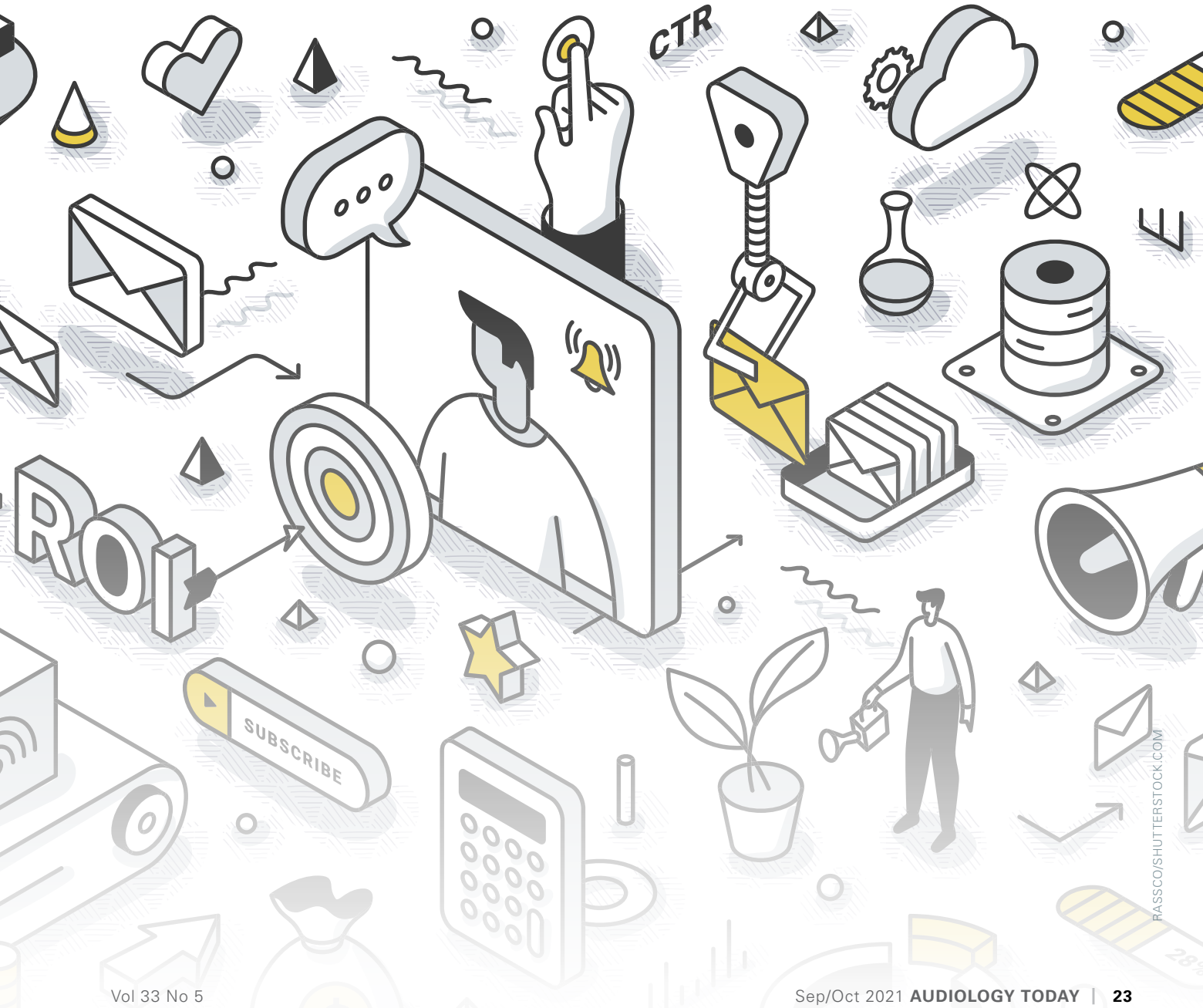
Demitrius Handelih is the senior marketing manager for FrontRow.

Finding Audiology Marketing Success on Autopilot

BY BRAD STEWART



As the audiology market becomes more competitive, with multiple sales channels and the proliferation of managed-care programs, it's more important than ever for audiology private practices to be proactive about their approach to marketing.



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How much time does your staff spend licking envelopes to hand-mail letters to your patients? How much energy and effort does your team put into managing patient follow-ups, recalls, end-of-warranty check-ups, and tested-not-treated (TNT) follow-ups?

Are there gaps that exist in your patient follow-up systems that could be letting prospects and current patients slip out of your practice and into your competitors' practices?

What if you could automate your database lifecycle marketing, using just the tools that are already included with many of today's most popular office management systems (OMSs) and without putting in daily effort to manage your patient lifecycle marketing?

Lifecycle marketing in our profession refers to ongoing marketing and messaging (mailers, newsletters, email updates, patient appreciation events, etc.) that a hearing-care practice conducts to keep its patients and prospects engaged with the practice and to keep the business top of mind.

This has been one of my biggest areas of focus as an audiology private-practice owner during the past seven years. That's why I'm so pleased that several of the most popular OMSs now allow businesses, such as audiology private practices, to automate their most important patient interactions.

What Is Marketing Automation?

You might or might not be familiar with the concept of marketing automation (FIGURE 1). Today's technology allows businesses to create systems that will follow up with, nurture, and communicate to clients and prospects, without the need for business owners and managers to lift a finger.

An automation can be as simple or as complex as you wish, but it should at least do the following:

- Send pre-made communications to patients and prospects at set intervals or based on set actions/triggers (e.g., a patient purchasing hearing aids triggers a series of communications).
- Include clear calls to action (CTAs) that influence a desired result.

You might be thinking: "But automation is so impersonal. I want to have a hands-on approach with my patients."

I hear this all the time. However, the reality is that automated marketing doesn't have to be impersonal. In fact, if it is implemented well, it will make your patient relationships feel much more personal and intimate because you will have so many more customized touch points throughout every year, with every patient in your database.

With persuasive and professional messaging that is personalized, based on your patient's phase in their relationship with your practice, you should see the following results:

- Leads and prospects trust you before ever entering your clinic.
- Your patients stay connected with your clinic, ensuring they never leave for your competitors.
- You consistently re-engage patients who are TNT and convert them into active

patients without manual follow-up.

Email and Direct Mail

In an audiology practice, I found two methods to be the most effective for automation marketing: email and direct mail.

If you strategically stack email marketing campaigns with complementary direct-mail marketing campaigns, you will see great return on investment (ROI), with minimal financial investment.

For example, if you send an annual check-up email, you could also send a postcard to increase the response rate and the likelihood that your patient will come back in for continuing care. This type of strategy can be used with any of your database marketing campaigns, using email and direct mail pieces that complement each other and increase the likelihood that your patients will respond.

The results of adding automated, trigger-based direct mail have been extraordinary in my clinic. Other clinics report benefits of direct mail, as well.

BlueWing, a marketing company, tracked the performance of 11 clinics using an



FIGURE 1. The cycle of creating both in-clinic and automated direct mail and email touchpoints to improve long-term patient engagement.

automated marketing system from September 2020 to January 2021 and reported $1,544 in collective marketing spent on automated direct mail resulted in a total of $74,997 in total sales across those clinics (BlueWing, 2021). The ROI on that marketing spend was 4,758.4 percent, with a $4 cost/appointment and $37 cost/unit. These numbers are unheard of in the audiology marketing industry.

> “Automated marketing doesn’t have to be impersonal.

Why Is Marketing Automation Important?

The audiology and hearing aid marketplace is becoming more competitive. This is simply a fact. Your patients now see hundreds of hearing-related marketing messages a year. Consumers can become overwhelmed by marketing messages and can easily be pulled from your clinic.

Digital marketing is now commonplace. Independent businesses that fall behind can get lost in the noise. For this reason, a structured and automated follow-up process that is on-brand will keep you top of mind and remind patients why they chose you in the first place.

The traditional “sales funnel” focuses on the customer experience up to the point of the sale, but no ongoing experience. Without continuing the relationship, your patients will be transactional versus relational (customers for life!).

The Three Campaigns That Will Create 90 Percent of Your Results

What I found with years of testing in my clinics is that there are three lifecycle-marketing triggers that will create the vast majority of your database marketing success—post-fitting follow-up, end-of-service-plan/end-of-warranty follow-up, and tested-not-treated follow-up. The good news here: This campaign process doesn’t have to be complicated!

You can build these campaigns and launch them in your clinic using the integrated patient-marketing software and trigger systems that may already be included in your OMS. Most

systems that have integrated marketing tools also have simple training videos showing how to set up campaigns. The customer support team for your system can assist you in making sure the campaigns function properly.

Once you build all three campaigns, you will be in the upper echelon of audiology practices. Your patients will feel engaged with your practice and your team will be much less stressed because they will not worry about getting too busy and getting behind on patient outreach.

As you consider each of the patient-outreach campaigns outlined below, consider reviewing your current communications (if any) and creating messaging that would work well in an email format. Then, work with your direct-mail vendor to create complementary mail pieces to be sent out at the same time as the email to reinforce the digital messaging.

Campaign #1: Post-Fitting Follow-Up Campaign

This campaign will be triggered by your patient's fitting date. All of the emails and mailers that go out in this campaign will be dripped out relative to the fitting date. Inside the post-fitting campaign are a few subsets of the campaign that you can run for greatest impact.

Post-fit, follow-up series

During this time, the patient is the most aware that hearing aids have created a profound change in their life. This is the time to build new reviews, create video reviews, build your "inner circle" or "better hearing ambassador" programs.

Email automations will help you stay connected between appointments. This is when you can send a welcome video to new patients and give your patients another avenue to communicate any questions or concerns they may have.

Device aging

This campaign is also triggered off of the fit date and the messaging is focused on the age of your patient's devices. You would be surprised how often we have people upgrading their two-year-old devices when this campaign is used as part of our early-upgrade strategy.

Bi-annual check-ups

These reminders only have the CTA of coming in for a check-up (possibly generating service revenue, depending on your business model). However, often by pairing these campaigns with satisfaction surveys or questionnaires, we see an increase in sales of accessories and technology early upgrades included with the check-up appointments.

Campaign #2: End-of-Service Plan/ End-of-Warranty Campaign

This campaign may become two different campaigns, depending on how you operate. For most of our patients, the service plan and warranty coincide. However, they might be two different dates for you. If this is the case, most OMSs have expiration dates for service and warranty that you can use as separate triggers for these automated campaigns.

The most critical CTAs for these campaigns are extended service plan options and extended warranty options.

I recommend that you use the appointments as an opportunity to educate your patients and, if appropriate, to demonstrate new technology. You may be surprised by how many patients are excited to upgrade into the most current hearing aids or purchase new accessories at these appointments and by how grateful they are that you educated them about the latest and greatest technology available.

Campaign #3: Tested-Not-Treated (TNT) Campaign

Many people ignore their patients who are TNT or make a token attempt at follow up. However, these individuals can be part of one of the most valuable groups in your database, if you have a system for follow up and proven strategies to guide them to treatment solutions that meet their needs and address their objections and concerns.

I suggest sending a healthy mix of education (e.g., make and send a video honestly addressing the top five to seven concerns

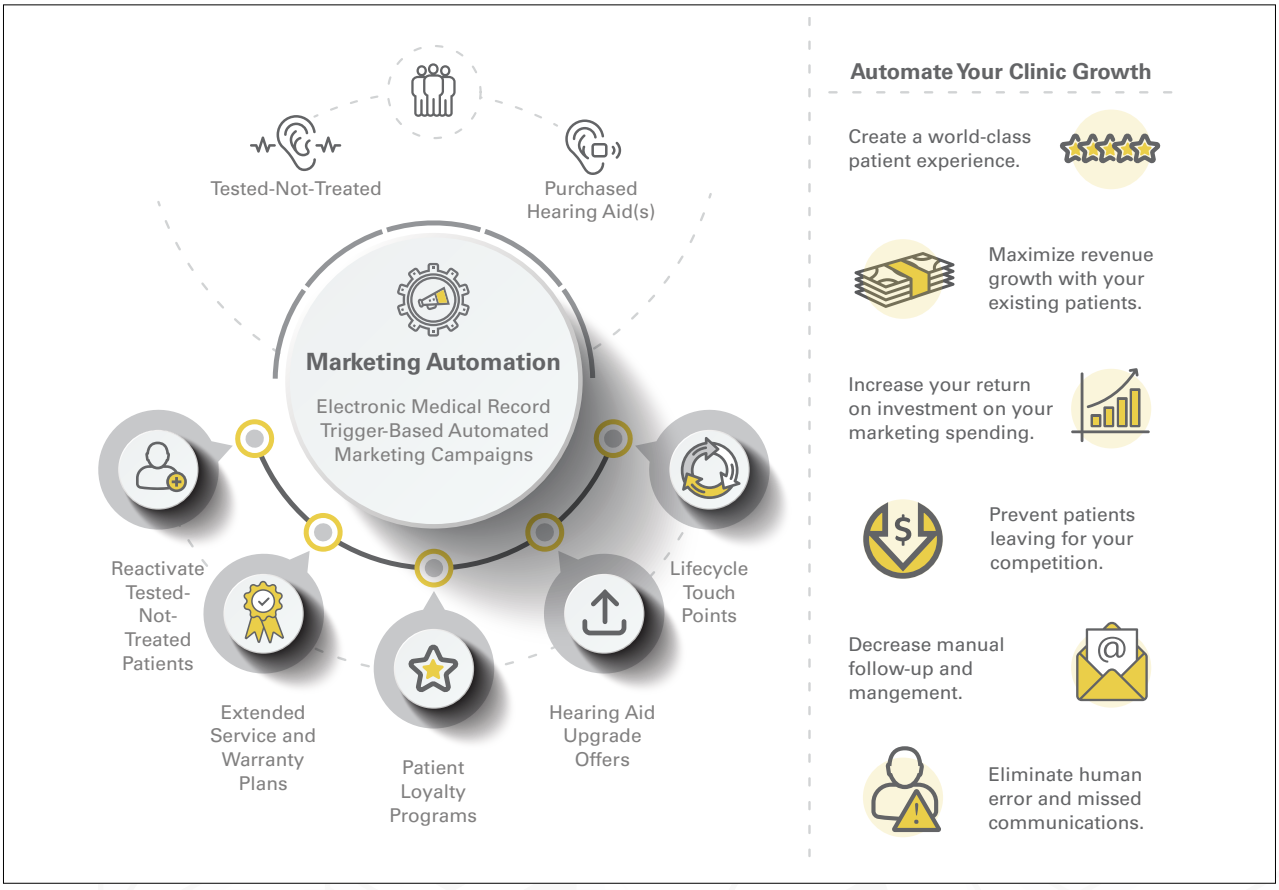


FIGURE 2. Ideal automated workflow that takes a prospect through the full patient lifecycle marketing automation process, and the long-term potential benefits of automated patient lifecycle marketing.

most people have about hearing aids) and offers.

In my clinic, we send 12 emails and five pieces of direct mail over the course of two years after a TNT consultation. We see the greatest ROI on the pieces we send in the first eight weeks. Overall, however, we see about 20 percent of our TNT patients return and purchase hearing aids, compared to the three percent industry-average TNT conversion (Minchow, 2010). Some of these purchases are as long as 18 to 24 months after the initial consultation.

So How Do I Automate My Marketing?

The good news is that, with today's OMS tools, you don't have to be a technology guru and you don't have to pay a marketing agency thousands of dollars a month to automate your marketing. Several OMSs have great automated marketing features built into their software, so it's possible that the software you're using every day in your clinic already has these tools available. You just need to do the work to set them up for your practice. An ideal automated workflow is illustrated in FIGURE 2.

Most of these systems have training guides for setting up marketing automation for your practice. Basically, it's simply a matter of writing the email content.

Many OMSs offer stock email templates. In addition, email templates and direct-mail pieces are available for purchase from other companies. Some OMS providers even partner with other companies to provide direct mail. However, I would not recommend using the stock emails because, as discussed below, the content and copywriting in your messages will be the difference between success and failure.

> One of the most critical parts of an email's impact is the subject line.

Copywriting Is Key

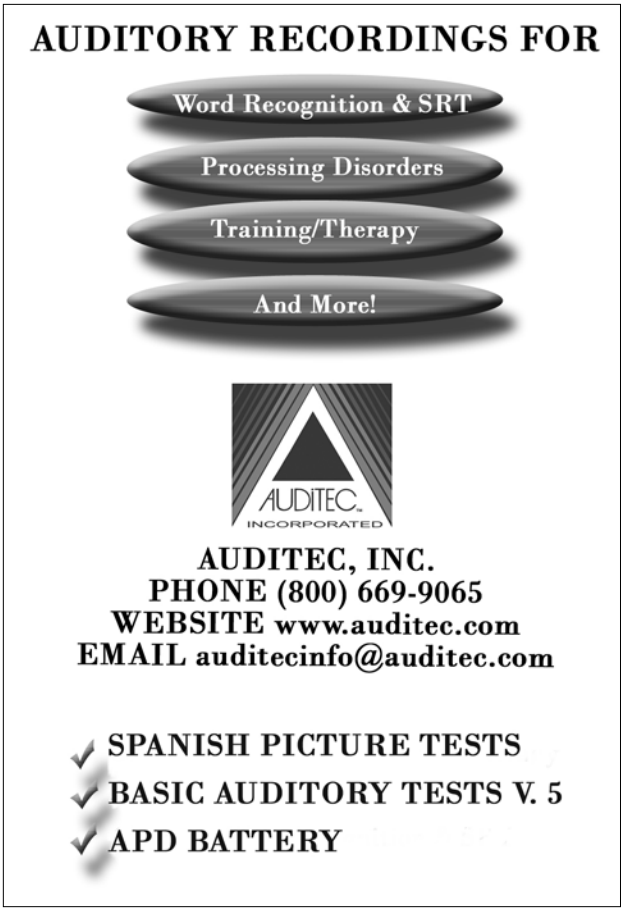
The messaging in your marketing pieces (also known as the copywriting) is the key to the success of your marketing campaigns.

If the messaging is overly technical or boring, your audience will quickly lose interest and your marketing won't be effective.

If you choose to build out your own marketing automation messages, remember that you are talking to a person. Make the language informal, personal, on-brand, and compelling. Ensure that, if the message has a call to action, it is strong and persuasive.

When writing marketing campaigns, I recommend using the following strategies:

- Use fewer words. The more concise, crisp, and to-the-point your messaging is, the better.
- No technical jargon. Write at a fifth-grade reading level.



- Use open loops or messaging that doesn't tie up immediately. Our brains desire completion and your patient will keep reading to close the loop.
- Make sure the first sentence is attention grabbing.

One of the most critical parts of an email's impact is the subject line. If it's boring or generic, it won't get opened.

Think about your own email inbox. If you are like me, you probably delete 80 percent or more of the promotional emails from companies you investigated or have done business with.

An email subject has to feel personal, like it's actually a friend writing you an email. Or it should be compelling, with open loops that cause people to click and learn more.

If you received an email with the subject line "I'm sorry," you would open it. Conversely, if the subject line from a business says "New statistics on the impacts of hearing loss" or "Come learn about new technology," you are probably going to hit the delete button without ever opening the email.

Match your messaging to the medium. If you are writing an email, it should read like a personal email, not a marketing newsletter. People are inundated with marketing, but they are open to a friendly email from their audiologist.

For example, one of my most successful email campaigns was sent to all of the patients in our database with devices at least three years old, as well as all of our TNT prospects. You'll find the language in the email is informal and non-technical, just as if I were writing an email to a friend.

This single email generated more than $60,000 in revenue in our clinics:

Hi [[Patient First Name]],

I know it's been a while since we talked.

A new product was just released by one of our top hearing aid manufacturers. It's rechargeable and does about 30 percent better than the previous generation in noisy environments. Sound quality is the best I've ever seen.

I'd like to have a sampling of people test them out so I can get some real-world feedback. Are you interested in trying a pair for a couple of weeks at no charge and sharing your experience with me?

If so, reply back or give us a call to set it up. Hope to hear from you soon!

Brad Stewart, AuD

Conclusion

This article is not an all-inclusive review of everything an audiology clinic can do to market its practice in today's world. I consider a strong, automated, database marketing program to be the foundation of best practice in our industry. Most clinics do not have these key systems built out for their practice.

You have already worked hard, and likely spent a lot of money, to get patients into your clinic and establish a relationship of trust. Therefore, it should be your top priority to make sure that those patients that already know, like, and trust you continue to work with you and refer their friends and family to you.

An automated marketing program is a very cost-effective marketing strategy and it also results in higher patient engagement with your practice and builds the value of your brand and your practice over time.

If you have not already developed an automated strategy to stay engaged with the patients and prospects in your database, now is the time! It will be the best thing you do for the health of your practice this year.

Brad Stewart, AuD, is an audiologist and founder of ClearLife Hearing Care in Dallas, Texas. He is the creator of www.EmailAudomation.com and co-founder of Audflow, an audiology hearing aid sales program.

References

BlueWing. (2021) Internal corporate report.

Minchow D. (2010) Minimizing your "tested-not-sold" patients. *Hear Rev* 17(6):18–23.





Communication Strategies and Speech-to-Text Transcription

BY AMANDA DEMAS AND AMANDA ORTMANN

Speech-to-text transcription (STT) traditionally has focused on human transcribers. Currently, there is a rise in the use of automatic speech recognition (ASR) technology as an alternative, which is not affected by the limitations of cost and provider fatigue. Combined with mindful communication strategies, both approaches can be used to improve the patient experience.

Introduction to STT

Speech-to-text transcription (STT) is the process of converting spoken words into text. STT does not refer to the captions themselves, but rather to the process of creating them. STT serves as an umbrella term that does not indicate how speech is transcribed, only that speech is being transcribed in some way.

The transcription process can be achieved either by human efforts or by artificial intelligence (AI). AI is defined as "the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages" (Oxford Languages, 2021).

STT is important for individuals who are d/Deaf or hard of hearing (U.S. Equal Employment Opportunity Commission, 2014). Additionally, STT is beneficial for the "normal" hearing population in environments with a poor signal-to-noise ratio (SNR), as well as in educational environments and for those who are second-language learners (Cucchiarini et al, 2000; Liao et al, 2020; Li, 2016).

Individuals in any of these situations are considered learners because they are often expected to listen, take notes, integrate

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information, and ask questions. If proper content access is not provided for these individuals and situations, learning may be compromised.

STT can be used in classrooms, meetings, conferences, movies, television shows, phone calls, and even small-group or one-on-one conversations. Regardless of the situation, STT has the ability to provide access to speech through real-time transcription.



Small things can make a big impact on audibility for listeners and learners.

Communication Strategies

Many audiologists are aware of good communication strategies and practice them every day. However, it can be easy to forget when presenting or in an academic environment. Small things, such as the rate of speech and body language, can make a big impact on audibility for listeners and learners.

Practicing Good Communication Strategies

Good communication strategies include the following:

- When presenting, avoid turning your back to the class or the audience. This is difficult, for example, when writing on a whiteboard or a blackboard. If you need to turn to write something down, pause your presentation until you can turn back and face your audience.
- When presenting virtually or in any situation where you do not need to wear a mask, avoid covering your mouth or obstructing the view of your mouth in any way. Looking down, looking to the side, holding a hand or object such as a coffee cup over your mouth or on your chin, can be distracting and can obstruct lipreading.
- Repeat questions and comments from the audience. If a question comes from someone who is sitting in the back, it can be difficult for those up front to hear or know who is talking. If you are in a virtual meeting, announce yourself before asking a question or

commenting. For example, start your interjection with "This is Amanda. My question is..."

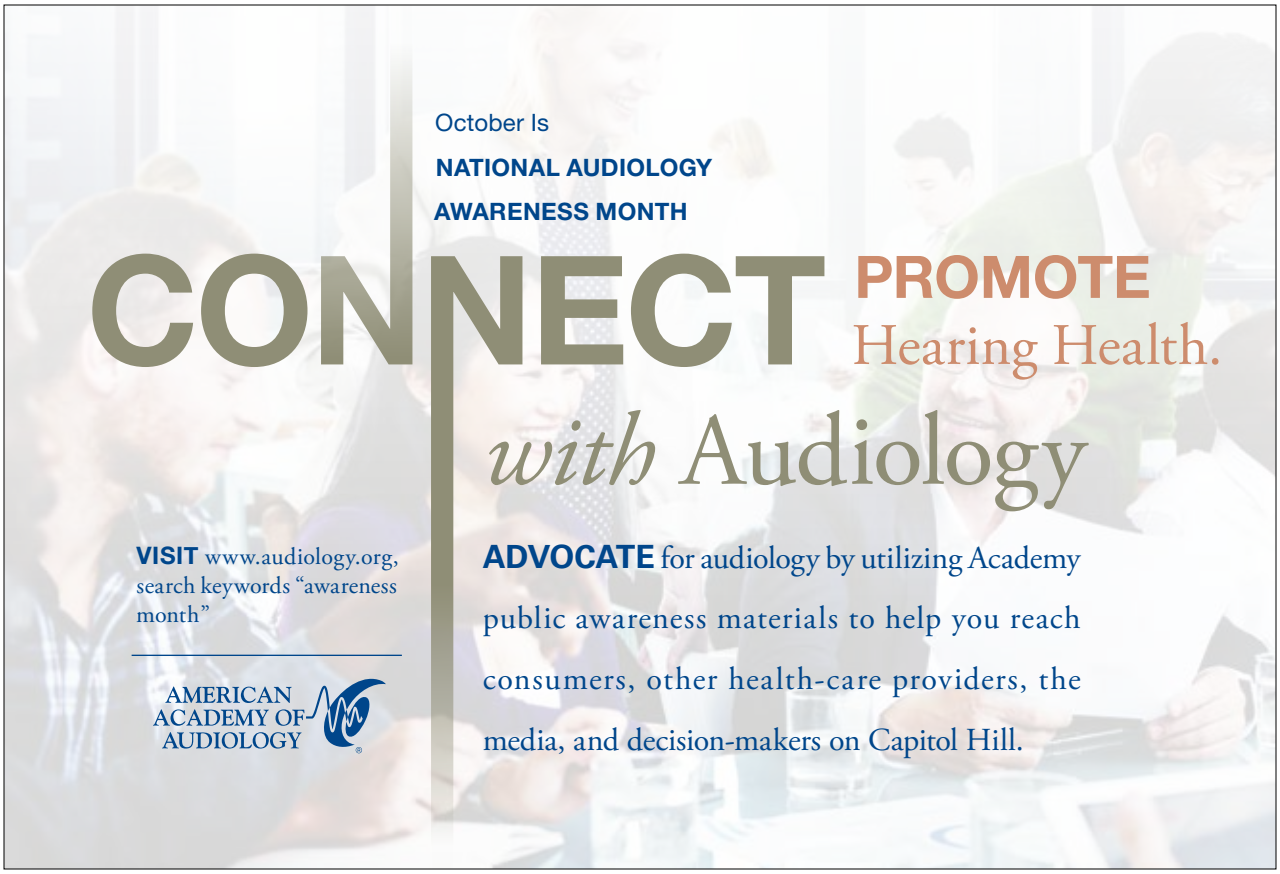
- Offer a copy of the course or meeting content beforehand, so the class or audience does not have to focus on taking notes, listening/reading, and understanding. These simultaneous tasks may be difficult, especially for someone who is d/Deaf or hard of hearing. Having the information beforehand helps provide context clues for spoken language.

STT

Many communication strategies help to provide visual cues by avoiding distracting activities that may obstruct lipreading. STT complements those strategies by providing the visual of the speaker's text as it is spoken in real-time.

Integrating STT into Your Practice

- Consider using or purchasing a lavalier microphone that has a direct connection to speakers in the room or a computer that can broadcast free STT captions from your presentation.
- Make closed captioning available; turn on closed captions. There are dozens of technology options that are free, Health Insurance Portability and Accountability Act (HIPAA) compliant, and easy to



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implement. As a presenter, opt to provide captions whenever you can. You never know who might benefit from them.

- When recommending STT for a patient, do not specify communication access real-time translation (CART). This limits the individual to one service, which can be denied due to high cost and limited availability of human stenographers. Instead, recommend STT as an umbrella term that embodies both CART and AI options.

Transcription Options: Human or AI

STT is universally important, as demonstrated by its use to create subtitles or closed captioning for movies, television shows, and live events. STT has made its way into modern society and is a permanent presence, due to laws such as the Americans with Disabilities Act (ADA) of 1990 and Section 1474 in Part C of the Individuals with Disabilities Education Act (IDEA).

These laws do not provide mandates on the process of providing STT or accuracy and latency requirements for STT, but do require that reasonable accommodations be offered. There are two broad forms of STT: transcription by a human and transcription by a computer/artificial intelligence.

Transcription by a Human Stenographer

Transcription by a human is achieved by a stenographer through CART, which is a commonly used accommodation for individuals who are d/Deaf or hard of hearing. CART providers are trained, beginning with courtroom reporting, then build their skills in preparation for the Certified CART Provider (CCP) Examination (Knight, 2020). Similar to the confidentiality requirement for courtroom reporting, CART is recognized as a HIPAA-compliant service.

Using a steno-writing machine, CART providers must consistently supply transcriptions that are at least 98 percent accurate in order to achieve certification (NCRA Broadcast and CART Captioning Committee, 2016). CART stenographers are expected to transcribe a minimum of 180 words per minute (wpm) on single-speaker dialogues and a minimum of 225 wpm on two-speaker dialogues (Miller, 2021).

CART is presumed to be highly accurate in its transcription and, until the development



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of speech-recognition technology, was the only transcription option available. However, accessibility to CART is often significantly hindered by financial burden and a shortage of trained professionals.

The Collaborative for Communication Access via Captioning (CCAC) found that CART services cost an average of $75 to $200 per hour (CaptionMatch, 2019). Extensive training, skill, and certification requirements have led to a shortage of providers.

The COVID-19 pandemic brought collective standards of social distancing and limited-occupancy allowances, which have made it difficult for CART providers to find their place in a physical setting. Remote CART options can be considered in these instances, but connection requirements often create equipment barriers and increased latency of transcription.

Introducing Human-Stenographer-Based STT in Your Practice

- Research local CART providers by using online resources such as stenoresearch.com and ncra.org to find out who your local providers are.
- Decide on remote CART or in-person CART and think about where an in-person provider would fit into your space.
- Establish good communication between your practice and your CART provider. This will be important to communicate service hours, share unique terminology that may be used during the session so that it may be entered into the steno machine, and agree upon a place to share the transcript after the session.

Transcription by AI

Over the last decade, automatic-speech-recognition (ASR) systems have emerged as a free or low-cost, widely accessible medium for STT. ASR technology uses AI to develop its own lexicon and improve in accuracy over time.

Continuous speech-recognition and transcription capabilities are not limited to STT and are also seen in devices such as Apple's Siri and Amazon's Alexa products. The integration of speech-recognition and transcription to household devices contributes to one of the advantages of AI-based forms of STT: universal accessibility. The ease of use and integration into "smart" devices has contributed to increased awareness and demand for AI.

STT offers inclusivity by providing access to real-time audio for individuals of any hearing ability. The increase in AI options, versatility, and ability to transcribe hundreds of languages makes STT universally accessible.

Introducing AI-Based STT in Your Practice

It is useful to evaluate the accuracy and latency of free or low-cost, readily available STT platforms such as machine learning or AI to provide an alternative to CART, without the limitations of cost, provider accessibility, and human fatigue.

Companies such as Google, IBM, Microsoft, and others are making STT technology available:

- Ava captioning technology was designed for accessibility in the workplace, specifically for individuals who are d/Deaf or

hard of hearing. Ava offers a range of services from AI alone to a combination of AI and a human scribe to correct AI captions in real time (Ava Scribe). The company claims a 90 to 99 percent accuracy rate. Ava is not HIPAA compliant (Ava, 2021). A subscription starts at $9.99 per month for one person and ranges up to $149 per month for a business. Product information is available at www.ava.me/.

- Google Live Transcribe is a machine-learning platform that can transcribe speech in 125 languages in real time. Google owns YouTube; the speech-recognition algorithm is used for video transcription from user-uploaded videos across the world. Google transcription is available on all Google platforms. Google Slides, Meet, and Docs are all HIPAA compliant if a business associate agreement (BAA) is signed (Google, 2021).
- Microsoft offers cognitive STT services in 85 languages through its Azure software platform. Free to low-cost STT services using artificial intelligence technology are available. The platform uses a customizable acoustic model to aid in accurate detection of speech in atypical environments. The technology can adopt frequently used terms for better recognition. Microsoft STT is HIPAA compliant (Microsoft, 2021). Product information is available at https://azure.microsoft.com/en-us/services/cognitive-services/speech-to-text/.



Implementing STT and strong communication strategies into your practice is easy.

- Otter.ai, an automatic-transcription technology, is gaining attention because of a partnership with Zoom. A purchased Otter account can be linked to Zoom and will appear in a sidebar on Zoom calls. In the future, Otter is expected to be available as an integrated system. While Otter is not specifically designed for accessibility, it

offers features including the ability to add photos for speakers, save and edit transcripts, and more. Use is free for individuals for up to 10 hours per month and ranges from $8 to $20 per month for unlimited individual or business use. Otter is not HIPAA compliant (Otter.ai, 2021). Product information is available at https://otter.ai/.

Ready, Set, STT!

Implementing STT and strong communication strategies into your practice is easy. Options are available in a range of pricing options, including low-cost or even free possibilities. Providing this service ensures that patients have good access to spoken information and helps perpetuate strong communication strategies in your practice.

Additional information on STT applications, connectivity information, and basics to share with patients can be found among the resources compiled by Tina Childress, AuD, available online at https://tinachildressaud.com.

DISCLAIMER

Due to the fluid nature of the technology industry, the applications, features, pricing, and technology specifications mentioned here may have changed since this article went to press.

Amanda Demas is a fourth-year AuD student at the Washington University School of Medicine and is completing her externship at Central Institute for the Deaf in St. Louis, Missouri. She earned a BS in psychology at Loyola University Chicago.

Amanda Ortmann, AuD, is assistant professor and director of clinical audiology studies in the program in audiology and communication sciences at the Washington University School of Medicine. She also serves as the clinical director of the division of adult audiology at the Washington University School of Medicine. Dr. Ortmann earned a PhD from the University of Pittsburgh and an MS in speech and hearing science from Washington University in St. Louis, Missouri.

References

Association of National Advertisers. (2010) The Benefits of Closed Captioning Commercials. ANA Production Management Committee. https://ecfsapi.fcc.gov/file/7521097468.pdf (accessed July 8, 2021).

Ava. (2021) Ava Privacy Policy. Ava. www.ava.me/privacy (accessed March 20, 2021).

CaptionMatch. (2019) General Information about Captioning and CART. captionmatch.com/general-info-captioning-cart/ (accessed October 18, 2019).

Childress T. (2021) Speech-to-Text Options. See Hear Communication Matters. docs.google.com/spreadsheets/d/18g0yT08qPmboMX5WUvacOOvN8M90tvr0_WtlhUxTd0k/edit#gid=376066376 (accessed April 1, 2021).

Cucchiarini C, Strik H, Boves L. (2000) Quantitative assessment of second language learners' fluency by means of automatic speech recognition technology. *J Acoust Soc Am* 107(2):989–999.

Google. (2021) HIPAA Compliance with Google Workspace and Cloud Identity. Google Workspace Admin Help. support.google.com/a/answer/3407054?hl=en (accessed April 1, 2021).

Google Cloud. (2021) Cloud Speech-To-Text. cloud.google.com/speech-to-text/ (accessed March 29, 2021).

IBM. (2021) What Is Artificial Intelligence (AI)? IBM Cloud Education. ibm.com/cloud/learn/what-is-artificial-intelligence (accessed March 4, 2021).

Knight M. (2020) Is CART Easier Than Court Reporting? StenoKnight CART Services. stenoknight.com/StudentCART.html (accessed March 20, 2021).

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Li M. (2016) Investigation into the Differential Effects of Subtitles (First Language, Second Language, and Bilingual) on Second Language Vocabulary Acquisition (Thesis). The University of Edinburgh. https://era.ed.ac.uk/handle/1842/22013 (accessed March 31, 2021).

Liao S, Kruger JL, Doherty S. (2020) The impact of monolingual and bilingual subtitles on visual attention, cognitive load, and comprehension. *J Spec Trans* (33)70–98.

Microsoft. (2021) Empower healthcare professionals with Microsoft Teams. microsoft.com/en-us/microsoft-teams/healthcare-solutions#:~:text=Built%20on%20the%20secure%20and,(GDPR)%2C%20and%20more (accessed April 1, 2021).

Miller C. (2021) Becoming a CART Provider FAQs. Florida Court Reporters Association. www.fcraonline.org/becoming-a-cart-provider-faqs (accessed February 17, 2021).

National Court Reporters Association. (2016) NCRA Broadcast and CART Captioning Committee. Guidelines for CART Captioners. www.ncra.org/docs/default-source/uploadedfiles/governmentrelations/guidelines-for-cart-captioners.pdf?sfvrsn=584f6a61_10 (accessed March 18, 2021).

Otter.ai. (2021) Otter is where conversations live. https://otter.ai/ (accessed March 20, 2021).

Oxford Languages. (2021) The Oxford English Dictionary. https://languages.oup.com/google-dictionary-en/ (accessed July 8, 2021).

United States Department of Education. (2021) Individuals with Disabilities Education Act. Section 1474. https://sites.ed.gov/idea/statute-chapter-33/subchapter-iv/part-c/1474 (accessed March 20, 2021).

United States Department of Justice, Civil Rights Division. (2021) The Americans with Disabilities Act of 1990 and Revised ADA Regulations Implementing Title II and Title III. www.ada.gov/2010_regs.htm (accessed April 20, 2021).

United States Equal Employment Opportunity Commission. (2014) Deafness and Hearing Impairments in the Workplace and the Americans with Disabilities Act. www.eeoc.gov/laws/guidance/deafness-and-hearing-impairments-workplace-and-americans-disabilities-act (accessed June 13, 2021).

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Spread the Word: Hearing-Health Care Matters!

By Heather Carter and Hannah Millstine

Don't get distracted by the "noise" of industry disrupters. Instead, focus on what matters most: treating patients and educating your community about hearing health as part of overall wellness.

Below are creative ways to spread this message by becoming the local hearing-health-care expert.

- Educate local primary care/specialty physicians (PCPs) about the comorbidities of hearing loss; encourage them to refer patients over 60 for a baseline hearing evaluation and consider joining forces (i.e., partner with a physical therapist to offer fall risk assessments and hearing screenings).
- Attend local events and join small business associations to become a recognizable face in the community.
- Host education events in-person and/or virtually like 'lunch and learns' and aural rehabilitation classes. Partner with PCPs to reach a broader audience.
- Get involved with local chapters of national health organizations (Walk4Hearing, American Diabetes, Alzheimer's Associations) and service clubs (Rotary, Lions).
- Create your own opportunities to give back (i.e., offer free screenings to first responders and their families).
- Integrate public relations into your outreach. Local news outlets are often looking for experts to advise on health topics.
- Build a strong website that includes an educational section.

For more tips, visit http://blog.consultyhn.com/wellness-and-outreach-ideas.

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Drs. Heather Carter and Hannah Millstine are audiologists and Consult account managers. Dr. Carter was recently appointed as the director of audiology and together, they're bridging clinical concepts with proven business strategies to keep practices competitive in our ever-changing industry.



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By Dianne Cooper

The hearing industry continues to evolve as consumer demand for hearing aid benefits increase. Today, 88 percent of health plans offer hearing aid benefits to attract and retain enrollees, according to the "Medicare Advantage 2021 Spotlight: First Look." This provides consumers with the flexibility to select a plan that best fits their health-care needs and allows NationsHearing® to successfully contract with leading managed-care organizations.

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Dianne Cooper, AuD, MBA, is the chief of audiology and chief experience officer at NationsBenefits®.

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Suicide Prevention and the Audiology Provider

BY LORI ZITELLI, DAVID JEDLICKA, TRICIA SCAGLIONE, AND IVETTE CEJAS



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Many health-care providers report a lack of education and training specific to suicide prevention. Audiologists should be aware of warning signs that indicate a patient may be at risk for suicidal behavior.

Suicide Risk Assessment and the Audiologist's Role

Suicide was the tenth leading cause of death in the United States overall in 2018 and the second leading cause of death for individuals 10 to 34 years of age, according to the U.S. Centers for Disease Control (CDC, 2020). Rates of suicide have been increasing since 1999, highlighting suicide as a global health concern.

Many health-care providers do not have specific training in this area and, consequently, lack the skills required to recognize warning signs and risk factors for suicide (Schmitz et al, 2012). In an effort to address this deficit, the American Association of Suicidology developed a curriculum titled "Assessing and Managing Suicide Risk" that details the core competencies required to assess and manage individuals at risk for suicide (Suicide Prevention Resource Center, 2021).

Although suicide risk assessment (SRA) is a process most commonly employed by mental health professionals, health-care providers in other roles may be presented with crucial opportunities to identify and mitigate suicide risk (Silverman and Berman, 2014). Audiologists are no exception.

Our patient population includes individuals suffering from complex medical needs that have been linked with higher rates of depression and anxiety (Riccio et al, 1994; Iliadou and Iakovides, 2003; Jüris et al, 2013; Aazh and Moore, 2017; Ziai et al, 2017; Cusack et al, 2018; Shoham et al, 2019; Lawrence et al, 2020; Siepsiak et al, 2020; Zhu et al, 2020), putting them at

ITEM	SCORING PROCEDURE	REFERRAL CRITERIA	REFERENCE
HADS	There are seven items each for depression and anxiety subscale. Each item is scored on a scale from 0–3, providing a 0–21 severity score.	Total subscale score ≥ 8	(Zigmond and Snaith, 1983)
PHQ-9	There are nine items. Each item is scored on a scale from 0–3, providing a 0–27 severity score	Score of ≥ 10	(Kroenke, Spitzer, and Williams, 2001)

TABLE 1. Scoring Procedures and Referral Criteria for the Hospital Anxiety and Depression Scale (HADS) and the Patient Health Questionnaire-9 Item (PHQ-9) Questionnaires

higher risk for suicidal thoughts and behaviors (Too et al, 2019). Depression is the most common diagnosis associated with suicide (Brådvik, 2018).

The prevalence of depression is often elevated in individuals with chronic medical conditions (Katon, 2011). Hearing loss, tinnitus, dizziness, and other hearing- and balance-related disorders are likely to require frequent medical appointments and have been linked with higher rates of depression or other mental health conditions (Savastano et al, 2007). Specifically, one study reported elevated rates of depression and anxiety in an otology practice using a mental-health screener (Cejas et al, 2021).

Despite this identified need to screen patients of audiology practices, little has been done to train audiologists in the foundational skills needed to implement such screenings. Audiology students and recent audiology graduates are unlikely to demonstrate competence in the area of suicide prevention, as 91 percent of audiology doctoral programs in the United States do not address issues related to the identification and prevention of suicide or self-harm (Whicker et al, 2017). There is no data available to indicate audiologists' level of familiarity or comfort with identifying risk factors and warning signs of suicidal behavior.

While one may argue that suicide assessment and treatment is outside of audiology's scope, audiology screenings are not. Screenings provide an avenue to help identify areas of concern before they develop into more serious or long-term problems.

To identify patients who may be at an increased risk for suicide, audiologists have been encouraged to use validated screening measures such as the Hospital Anxiety and Depression Scale (HADS) (Zigmond and Snaith, 1983) or the Patient Health Questionnaire-9 Item (PHQ-9) (Kroenke et al, 2001) to assess symptoms of anxiety and depression (Schwartzer and Parker, 2019). The goal of using these tools is to identify those who may need further evaluation by a qualified mental-health specialist.

Audiologists who choose to use these questionnaires should know that these measures are used to help identify individuals at risk who may need a comprehensive mental-health evaluation. Elevated scores do not mean that the individual meets diagnostic criteria for a mental-health disorder. Audiologists interested in using these screening measures should familiarize themselves with the scoring procedures and referral criteria (see TABLE 1).

Although screening tools may help identify those individuals ready to fully disclose their symptoms, they may not identify those individuals who are fearful of sharing their thoughts. Thus, audiologists should also familiarize themselves with the warning signs for suicide, as these may be more passive or subtle (Rudd et al, 2006; Al-Mosaiwi and Johnstone, 2018; Crisis Services, 2021).

Patients may not always explicitly state their suicidal thoughts or intentions and may use vague language to allude to the aforementioned (Isometsa et al, 1995). Therefore, audiologists should be alert to any early signs that their patients may

TABLE 2. Examples of Statements or Actions that May Be Considered Warning Signs for Suicide

WARNING SIGN	EXAMPLE STATEMENT OR ACTION
Talking about wanting to die or kill themselves.	"I'm going to end it all." "It will be over soon." "It doesn't matter anymore." "If I see you again..."
Looking for a way to kill themselves.	Seeking access to guns, pills, knives, or other objects that could be used in a suicide attempt.
Talking about feeling hopeless, having no reason to live, feeling trapped, or being in unbearable pain.	"There's no way out." "Things can never change." "I can't live like this anymore."
Talking about being a burden to others.	"I feel so worthless." "Everyone would be better off without me."
Unsafe behaviors	Increased alcohol or drug use, reckless driving, unsafe sex, taking unnecessary risks as if they have a "death wish."
Sleeping too much/too little or isolating themselves.	Withdrawing from friends and family, increasing social isolation, expressing a desire to be left alone.
Displaying extreme mood swings.	A sudden sense of calm and happiness after being extremely depressed, displaying rage, expressing the desire to seek revenge.
Getting affairs in order.	Making out a will, giving away prized possessions, making arrangements for family members or pets, unusual or unexpected visits or calls to family and friends, saying goodbye to people as if they won't be seen again.
Absolutist thinking	"I always screw things up." "My life is totally ruined." "Things will never get better."

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be at risk. Evidence suggests that becoming familiar with the warning signs of suicide may increase the ability to recognize suicidal crises (Van Orden et al, 2006). TABLE 2 provides a non-exhaustive list of warning signs and examples of statements or actions that would fall into each category (Rudd et al, 2006; Al-Mosaiwi and Johnstone, 2018; Crisis Services, 2021).

What to Say, How to Say It, and What to Do Next

Audiologists who have not received training in suicide prevention may have reservations about addressing this issue with patients. This hesitancy may relate to a lack of training, knowledge, education, support, and experience (Taylor et al, 2009; McHale and Felton, 2010; Conlon and O'Tuathail, 2012; Saunders et al, 2012; Giacchero Vedana et al, 2017).

Experts in the area of suicide prevention recommend that providers should make efforts to listen non-judgmentally and express care without overreacting (Richards et al, 2019). Both verbal and non-verbal behavior is important in helping to reduce the stigma related to discussing thoughts of suicide, as well as in allowing the patient to feel comfortable disclosing thoughts and feelings.

Simple strategies such as nodding your head, sitting versus standing, and compassionate facial expressions are extremely important. In addition, statements such as, "It seems like you have been going through a lot" or "It sounds like you are having a hard time" can help ameliorate defensiveness and allow patients to share more openly.

When warning signs are present and/or patients report feelings of depression or hopelessness, direct questioning regarding thoughts of self-harm is warranted. These questions could include: "Have you had thoughts of hurting yourself in some way," "Have you felt that you or your family would be better off if you were dead," or "In the past week, have you had thoughts about killing yourself" (National Institute of Mental Health, 2021).

If the answer to any of these questions is "yes," a follow-up question such as "Are you having thoughts of killing yourself right now" may provide additional information that can be passed along to a provider who is qualified to complete an SRA.

If the answer is "no," realize that your patient may not answer truthfully for a variety of reasons, not limited to a fear of being stigmatized or losing their autonomy. In this case, consider that the individual may still display warning signs that may warrant further attention and investigation (Flasher and Fogle, 2012; Bryan and Rudd, 2018; Richards et al, 2019).

When a crisis or a potential crisis has been identified, an audiologist should immediately attempt to find a qualified mental-health specialist to conduct a formal suicide assessment. If there is no mental-health provider available, a number of resources can be used, including, but not limited to, the National Suicide Prevention Lifeline (800-273-8255) (SAMHSA, 2021), a local crisis network, emergency medical services, or another one of the patient's health-care providers who is qualified to provide crisis services.

Case Example 1: 'John'

Detailed below is a real-life case example of a patient who presented with warning signs for suicidal behavior to an audiologist.

John (a pseudonym), a man initially presenting to the office when he was 38 years old, was suffering significantly from decreased sound tolerance (DST), specifically hyperacusis, in his left ear. He worked in a steel mill and reported that, although he was not required to wear hearing protection at work, he obtained custom earplugs due to increased sensitivity to sounds. He reported occasional tinnitus that was not bothersome.

Provider's should express care without overreaching.

He ranked the severity of his DST issue, his annoyance level at bothersome sounds, and the effect of DST on his life as 10/10 on a visual analog scale (VAS) (0 being no problem, 10 being the worst problem imaginable). Loudness discomfort levels (LDLs) were reduced in his left ear.

When asked about depression, anxiety, or other relevant health issues, he reported that he experienced both anxiety and depression because of his DST. He also indicated that he occasionally felt like he wanted to "check out."

Recognizing this language as a warning sign for suicidal behavior, John's audiologist provided him with contact information for the local crisis hotline and encouraged him to use that resource if needed. He was encouraged to physically present himself to an emergency room for help if he ever felt like the need was urgent and he agreed that he would be open to this. He denied having a specific plan for suicide and assured his audiologist that such thoughts were rare.

John was amenable to exploring other treatment options for anxiety and depression with his primary-care physician (PCP) and indicated that he would initiate conversations related to this topic at his next appointment. Other treatment options specific to DST were discussed (e.g., tinnitus retraining therapy

(TRT) and cognitive behavioral therapy (CBT)). John wanted to consider these options before committing to a specific treatment protocol. He lived a significant distance away from his audiologist's office and expressed the desire to receive follow-up care by phone whenever possible.

When he left the office on the day of his initial appointment, his audiologist called John's PCP's office to relay information about the discussion related to suicide, which is permissible when acting in good faith to prevent or lessen a threat to the safety of patients or others. Two days after this conversation, John called his audiologist to thank them for relaying their concerns to his PCP, indicating that he appreciated the concern for his safety.

Three weeks later, the physician's assistant (PA) from John's primary-care office called to share that John was in their office on that day experiencing severe distress related to DST and tinnitus. John reported to the PA that he had a deer rifle in his vehicle and was considering suicide. The clinical staff at this office encouraged John to admit himself to a psychiatric unit for emergency care, but John was resistant and indicated that he was very eager to begin TRT.

John reported that the primary reason he was resisting in-patient psychiatric treatment was that he was the primary caregiver for his daughter, but that he was agreeable to working with an out-patient psychology provider. John left the appointment at his PCP's office with a treatment plan (outpatient psychiatric care and TRT), including a safety plan that detailed who he could notify (i.e., spouse, close family member) if he had active suicidal thoughts and what he should do with any weapons/objects he could use to hurt himself.



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John began the TRT protocol for hyperacusis immediately following this appointment. Two months after the delivery of his audiological devices, he reported by phone that he was extremely pleased with his progress and, although he had occasional days when he felt anxious about his sensitivity, his symptoms were significantly improved when compared to his pre-treatment status.

At his four-month follow-up appointment, John repeated the VAS rankings. His severity/annoyance/effect-on-life rankings had improved to 4/7/5 (compared to initial scores of 10/10/10). He reported that he had been wearing the devices consistently and appropriately, with significant benefit. He also indicated that he had been pushing himself to participate in more social interactions, which resulted in enjoying time with his family and friends, continuing to develop relationships, and looking forward to the future.

He declined repeat LDL testing due to time constraints (he was anxious about getting to another appointment on time) and requested to be dismissed from TRT due to the anxiety

he experienced when driving into the city for appointments. John reported that he had gained the tools he felt he needed to cope with DST (on-ear devices, the educational counseling component of TRT, and an effective anti-anxiety medication). He reported feeling that he was living a normal life and feeling very hopeful about the future.

Case Example 2: 'Miguel'

Miguel (a pseudonym), a 51-year-old male, initially contacted a department of otolaryngology to request a tinnitus consultation. He expressed to the scheduling representative that he was experiencing suicidal thoughts secondary to his tinnitus. The representative immediately connected the patient to the department's in-house psychologist to address Miguel's mental-health status and offer support resources. Miguel was determined to not be of immediate risk of harm and was scheduled for an ear-nose-and-throat (ENT) consultation.

Two days later, Miguel was seen for an in-person consultation with an ENT specialist. He presented with an outside audiogram that demonstrated normal hearing sensitivity (250–8,000 Hz) and excellent word recognition (100 percent) for both ears. At the time of his visit, he reported the onset of bilateral tinnitus and the sensation of explosions in his head following a rapid titration of Zoloft three months prior.

The symptoms described were reported to be debilitating, resulting in the patient quitting his job and moving across the country to live with his mother. At times, the patient sought care for his tinnitus and head sensation from multiple emergency rooms within the same day, with no obvious medical findings.

During the ENT consultation, the patient underwent management of bilateral cerumen impactions and was subsequently referred to the in-house tinnitus clinic and department of neurology. He was scheduled for a tinnitus consultation to take place in three business days. An earlier appointment was not available, as the tinnitus provider was out of the office.

Miguel contacted the American Tinnitus Association (ATA) two days following his ENT consultation to request tinnitus support. The ATA representative reached out to the same medical facility where the patient was currently receiving care and was informed that the patient was already scheduled to be seen the next business day.

Exactly one week following his initial contact with the facility, Miguel was seen for an extended tinnitus consultation, which included a tinnitus education session, tinnitus assessment, and counseling. He was accompanied to this appointment by his mother, Sandra (a pseudonym).

In the education session, Miguel and Sandra were counseled on understanding and managing tinnitus, including using sounds in the environment to reduce tinnitus awareness, changing negative thoughts and emotions pertaining to the tinnitus, and the use of available therapeutic devices that could aid in tinnitus management. The patient was additionally counseled on multidisciplinary management of tinnitus, including consultations with other professionals for issues that could be influencing tinnitus or contributing to tinnitus awareness/disturbance.

An extensive intake was completed and included the completion of subjective tinnitus questionnaires. A mental-health screening was not performed, given the patient's recent phone screening with the department's psychologist.

The tinnitus questionnaires included the Tinnitus Functional Index (TFI), which yielded a score of 96.40 out of a possible 100 and a max score of 104 on the Tinnitus Reaction Questionnaire (TRQ). Miguel also selected a score of 4 (almost all of the time) on question #24 (My tinnitus has led me to think about suicide).

This was addressed by the tinnitus provider at the time of the visit. Miguel relayed he had thoughts of suicide, but did not have a plan or any intention to harm himself or others. His mother confirmed that she was aware of his mental state.

Out of an abundance of caution, the tinnitus provider contacted the department's psychologist to discuss the TRQ score. The psychologist guided the tinnitus provider to reiterate the importance of establishing care with a mental-health provider as soon as possible and to contact 911 or the nearest emergency room if Miguel was experiencing suicidal thoughts. The patient expressed an understanding of these recommendations.

Miguel also was advised to seek a consultation with neurology regarding the sensations he was experiencing in his head, as recommended by his ENT. For the management of debilitating tinnitus, bilateral ear-level tinnitus sound generators were recommended, as was stress management including exercise and yoga.

> An audiologist may be the first and only person with whom an individual shares thoughts of suicide.

Relaxation techniques including mindfulness, deep breathing, and guided imagery, as well as smartphone applications, were reviewed with the patient. Positive affirmations, as well as cognitive behavioral therapy for

tinnitus and insomnia (CBTi), were encouraged. The patient expressed that he was feeling more positive at the end of the visit.

Two days following the tinnitus consult, Sandra reached out to Miguel's tinnitus provider via email to express concern for her son's well-being. The provider immediately contacted her by telephone and instructed her to bring her son to the nearest emergency room or call 911 if she had concerns for immediate harm to Miguel or others.

Sandra advised that she herself was at a doctor's appointment and asked that the tinnitus provider call to check in on Miguel. The provider placed a telephone call to the patient. Upon answering the phone, the patient expressed that he was not doing well and was in the act of searching the internet for painless ways to commit suicide. He verbalized that he was frustrated that he was not finding what he felt were viable options.

While the provider kept the patient talking on the phone, they texted the department psychologist for emergency support. The provider was guided to remain on the phone and have nursing staff contact 911. The local police department was dispatched to the patient's residence to conduct a safety and wellness check.

The provider continued the conversation with the patient until emergency personnel arrived. At the encouragement of the provider, the patient presented himself to the officers and spoke about his immediate state. The provider disconnected from the call once they confirmed that the patient was in the direct care of the officers.

The patient agreed to be transported to a local hospital for further assessment and was held for 24-hour observation before voluntary release. He followed up with psychiatry within one week. A department of otolaryngology social worker contacted the patient within this time frame to follow up with the patient. The patient expressed gratitude for the resources and information provided by the tinnitus specialist.

A few weeks later, the patient contacted the tinnitus provider to notify them that he sought a second opinion with another local tinnitus facility. As the recommendations provided were similar to those offered by the initial tinnitus provider, the patient indicated he was ready to pursue ear-level tinnitus sound-generator devices.

The patient was seen within a week to be fit with demo units to use until his own devices were received. During this time, the COVID-19 pandemic was declared, which resulted in patient-care service disruptions. Miguel's fitting was deferred for three months, during which he was allowed to maintain the use of the demo units.

At the time of the device fitting, Miguel reported he was under routine care of a mental-health specialist, taking a prescription antidepressant and benzodiazepine, and had been rarely using the demo units, as he found relief though using sound enrichment though electronic devices at home (tv, radio). Despite the lack of demo-device use, he was motivated to obtain his own units.

Subjective tinnitus questionnaires were reassessed and demonstrated a reduction of 7.6 on the TFI, 18 points on the TRQ and a response to question #24 with a score of 0 (not at all). Ultimately, the patient returned the devices within the 30-day trial period and has not returned to the clinic since that time.

Conclusion

Audiologists bear the shared responsibility of identifying and mitigating suicide risk. In a situation where a patient is suffering significantly from a hearing or balance disorder, an audiologist may be the first and only person with whom an individual shares thoughts of suicide.

These experiences should be viewed as opportunities for audiology to help bridge the mental-health gap by reducing stigma, breaking down barriers that prevent the open discussion of difficult topics, connecting with patients who are emotionally struggling, and ultimately saving lives.

Lori Zitelli, AuD, CH-TM, is a managing audiologist at the University of Pittsburgh Medical Center (UPMC) and a lab instructor at the University of Pittsburgh.

David Jedlicka, AuD, is a staff audiologist at the VA Pittsburgh Healthcare System and an adjunct professor at the University of Pittsburgh.

Tricia Scaglione, AuD, ABA Certified, CH-AP, is an assistant professor, clinical audiologist, and director of the Tinnitus and Sound Sensitivities Program within the Department of Otolaryngology at the University of Miami Hospital in Plantation, Florida.

Ivette Cejas, PhD, is an associate professor, clinical psychologist, and director of Family Support Services within the Department of Otolaryngology at the University of Miami in Miami, Florida.

References

Aazh H, Moore B. (2017) Factors associated with depression in patients with tinnitus and hyperacusis. *Am J Audiol* 26(4):562–569.

Al-Mosaiwi M, Johnstone T. (2018) In an absolute state: Elevated use of absolutist words is a marker specific to anxiety, depression, and suicidal ideation. *Clin Psych Sci* 6(4):529–542.

Brådvik L. (2018) Suicide risk and mental disorders. *Int J Env Res Pub He* 15(9):2028.

Bryan C, Rudd M. (2018) *Brief Cognitive-Behavioral Therapy for Suicide Prevention*. New York: Guilford Press.

Cejas I, Coto J, Sanchez C, Holcomb M, Lorenzo NE. (2021) Prevalence of depression and anxiety in adolescents with hearing loss. *Otol Neurotol* 42(4):e470-e475.

Centers for Disease Control and Prevention (CDC). (2020) Web-Based Injury Statistics Query and Reporting System (WISQARS). National Center for Injury Prevention and Control. www.cdc.gov/injury/wisqars (accessed July 19. 2021).

Conlon M, O'Tuathail C. (2012) Measuring emergency department nurses' attitudes toward deliberate self-harm using the self-harm antipathy scale. *Int Emerg Nurs* 20(1):3–13.

Crisis Services. (2021) Risk Factors. http://crisisservices.org/suicide-prevention/risk-factors (accessed June 12, 2021).

Cusack S, Cash T, Vrana S. (2018) An examination of the relationship between misophonia, anxiety sensitivity, and obsessive-compulsive symptoms. *J Obsess-Compuls Rel* 18: 67–72.

Flasher L, Fogle P. (2012) *Counseling Skills for Speech-Language Pathologists and Audiologists*. 2nd Edition. Clifton Park, NY: Delmar Learning.

Giacchero Vedana K, Magrini D, Zanetti A, Miasso A, Borges T, dos Santos M. (2017) Attitudes towards suicidal behaviour and associated factors among nursing professionals: A quantitative study. *J Psychiatr Ment Hlt* 24(9–10):651–659.

Iliadou V, Iakovides S. (2003) Contribution of psychoacoustics and neuroaudiology in revealing correlation of mental disorders with central auditory processing disorders. *Gen Hosp Psychiat* 2:1–5.

Isometsa E, Heikkinen M, Marttunen M, Henriksson M, Aro H, Lonnqvist J. (1995) The last appointment before suicide: Is suicide intent communicated? *Am J Psychiat* 152(6):919–922.

Jüris L, Ekselius L, Andersson G, Larsen H. (2013) The hyperacusis questionnaire, loudness discomfort levels, and the hospital anxiety and depression scale: A cross-sectional study. *Hear Bal Comm* 11(2):72–79.

Katon WJ. (2011) Epidemiology and treatment of depression in patients with chronic medical illness. *Dialogue in Clin Neuro* 13(1):7–23.

Kroenke K, Spitzer R, Williams J. (2001) The PHQ-9: Validity of a brief depression severity measure. *J Gen Intern Med* 16(9):606–613.

Lawrence B, Jayakody D, Bennett R, Eikelboom R, Gasson N, Friedland, P. (2020) Hearing loss and depression in older adults: A systematic review and meta-analysis. *Gerontologist* 60:E137–E154.

McHale J, Felton A. (2010) Self-harm: What's the problem? A literature review of the factors affecting attitudes toward self-harm. *J Psychiatr Ment Hlt* 7(8):732–740.

National Institute of Mental Health. (2021) Ask Suicide-Screening Questions (ASQ) Toolkit. www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials (accessed July 27, 2021).

Riccio C, Hynd G, Cohen M, Hall J, Molt L. (1994) Comorbidity of central auditory processing disorder and attention-deficit hyperactivity disorder. *J Am Acad Child Psy* 33(6):849–857.

Richards J, Whiteside U, Ludman E et al. (2019) Understanding why patients may not report suicidal ideation at a health care visit prior to a suicide attempt: A qualitative study. *Psychiat Serv* 70(1):40–45.

Rudd M, Berman A, Joiner T et al. (2006) Warning signs for suicide: Theory, research, and clinical applications. *Suicide Life-Threat* 36(3):255–262.

Saunders K, Hawton K, Fortune S, Farrell S. (2012) Attitudes and knowledge of clinical staff regarding people who self-harm: A systematic review. *J Affect Disorders* 139:205–216.

Savastano M, Marioni G, Aita M. (2007) Psychological characteristics of patients with ménière's disease compared with patients with vertigo, tinnitus, or hearing loss. *Ear Nose Throat J* 83(3):148-156.

Schmitz W, Allen M, Feldman B et al. (2012) Preventing suicide through improved training in suicide risk assessment and care: An american association of suicidology task force report addressing serious gaps in U.S. mental health training. *Suicide Life-Threat* 42:292–304.

Schwartzer S, Parker M. (2019) Suicide, self-harm considerations in holistic audiological care. *Hear J* 72:26–27.

Shoham N, Lewis G, Favarato G, Cooper C. (2019) Prevalence of anxiety disorders and symptoms in people with hearing impairment: a systematic review. *Soc Psych Psych Epid* 54:649–660.

Siepsiak M, Sobczak A, Bohaterewicz B, Cichocki Ł, Dragan W. (2020) Prevalence of misophonia and correlates of its symptoms among inpatients with depression. *Int J Env Res Pub He* 17(15):1–11.

Silverman M, Berman A. (2014) Suicide risk assessment and risk formulation part I: A focus on suicide ideation in assessing suicide risk. *Suicide Life-Threat* 44(4):420–431.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2021) Lifeline. https://suicidepreventionlifeline.org (accessed June 12, 2021).

Suicide Prevention Resource Center. (2021) Assessing and Managing Suicide Risk: Core Competencies for Mental Health Professionals (AMSR). https://sprc.org/resources-programs/assessing-and-managing-suicide-risk-core-competencies-mental-health-professionals (accessed June 11, 2021).

Taylor T, Hawton K, Fortune S, Kapur N. (2009) Attitudes towards clinical services among people who self-harm: Systematic review. *Brit J Psychiat* 194:104–110.

Too L, Spittal M, Bugeja L, Reifels L, Butterworth P, Pirkis J. (2019) The association between mental disorders and suicide: A systematic review and meta-analysis of record linkage studies. *J Affect Disorders* 259:302–313.

Van Orden K, Joiner T, Hollar D, Rudd M, Mandrusiak M, Silverman M. (2006) A test of the effectiveness of a list of suicide warning signs for the public. *Suicide Life-Threat* 36(3):272–287.

Whicker J, Muñoz K, Butcher G, Schultz J, Twohig M. (2017) Counseling training in AuD programs: A syllabi review. *Hear J* 70(8):36–39.

Zhu C, Li Y, Ju Y, Zhao X. (2020) Dizziness handicap and anxiety depression among patients with benign paroxysmal positional vertigo and vestibular migraine. *Medicine* 99(52):e23752.

Ziai K, Moshtaghi O, Mahboubi H, Djalilian H. (2017) Tinnitus patients suffering from anxiety and depression: a review. *Int Tinnitus J* 21(1):68–73.

Zigmond A, Snaith R. (1983) The hospital anxiety and depression scale. *Acta Psychiat Scand* 67(6):361–370.

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Consistency Is Key to Providing the Best Care for Your Patients

By Mary Ormson

Whether performing a comprehensive audiological assessment or verification of a hearing aid fitting with probe microphone measurements, audiologists can use integrated software solutions to maximize an efficient workflow.

Access to the right software tools helps ensure consistent and accurate reporting of test results and improved productivity while minimizing interruptions when moving between assessments.

Working in a single software platform offers many benefits for an integrated workflow, including:

- An efficient work process facilitating performance of routine tasks.
- Consistency with user-defined required tests within custom protocols.
- Detailed custom report templates to include test results from multiple devices.

The result is two-fold: a better experience for the patient from assessment to fitting and an increase in confidence for the clinician that the work performed is complete and accurate.

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Mary Ormson, AuD, is a senior global education manager with Natus Medical Incorporated.

Learn How Tele- and Mobile-Audiology Processes Can Increase Patient Reach

By Renée Lefrançois

There are several technological tools that can help clinicians provide hearing-health care, including hearing screening and diagnostic testing outside the traditional clinic. Methods can range from patients having diagnostic hearing testing done in person outside of the hearing clinic, to an entire tele-audiology process in which the clinician is not physically with the patient, but instead remotely connected.

A leading concierge audiology service in the United States is offering hearing tests, hearing aid fittings, adjustments, and ongoing care, all from the comfort of a patient's home. The company recognized an unmet need to provide in-home hearing testing to those who are better served by home hearing care than the traditional in-clinic model.

Another example of this involves a business conducting a diagnostic hearing testing in the patient's home, with the clinician not physically present. Instead, they use an online video link to interact with the patient, a true tele-audiology practice. A full tele-audiology workflow may not work for all clinicians or patients but can be an effective alternative for many.

Additionally, another option is to use an online screener to remotely screen and triage patients into hearing loss categories. For some patients, it may be appropriate to use SHOEBOX Online as a first step in their remote hearing aid journey.

LEARN MORE: www.shoebox.md.

CONTENT PROVIDED BY SHOEBOX LTD.

Renée Lefrançois, MSc, Reg. CASLPO, CAOHC PS/A is a director of audiology with SHOEBOX Ltd.



Telehealth Policy Basics

By Anna Marie Jilla

Please note that telehealth guidelines and policies related to the COVID-19 pandemic continue to evolve on multiple policy fronts but, unfortunately, some states are beginning to restrict telehealth provisions as COVID-19 emergency declarations are phased out. Some information in this article may have changed since the article was submitted for publication. It is recommended that clinicians reference primary sources of information (e.g., government or payer guidance) whenever possible.

The need for telehealth options for audiological care was already apparent prior to the COVID-19 pandemic. Increased use of telehealth as a mode of service provision has been necessary to provide timely access to care.

In May 2020, cochlear implant programming procedure codes were added to the Medicare code list for services eligible to be provided remotely (Chakrabarty et al, 2020). Multiple organizations, including the American Academy of Audiology, have advocated for the addition of other services to be reimbursed when provided remotely.

On March 30, 2021, the Centers for Medicare and Medicaid Services (CMS) released a new list of services eligible for telehealth. These additions have not changed the list of Medicare-covered

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services, but have added certain covered services to be reimbursable through Medicare when provided via telehealth (CMS, 2021). The purpose of this review is to discuss relevant topics in telehealth coding and billing that providers may encounter in the course of practice.

Telehealth Sites

There are two distinct sites in the provision of telehealth:

- Originating site—This is the site from which the patient is requesting services. The patient's location may be indicated on the claim form at their physical address.
- Distant site—This is the site from which the practitioner is providing services. The practitioner's location is indicated by place-of-service (POS) codes.

State Regulation

Practitioners providing services via telehealth should be familiar with the originating site's state law and regulatory policy on the provision of telehealth services. Practitioners should be licensed in the originating site's state when providing telehealth services.

Efforts are underway to implement the Audiology and Speech-Language Pathology Interstate Compact (ASLP-IC, 2021) to reduce regulatory burden and increase uniformity of licensure, facilitating timely access to care across state lines. The ASLP-IC has support from the requisite minimum of the 10 member states needed to establish a rules committee. At the time of this writing,

additional states continue to join the compact and rules are forthcoming.

Types of Telehealth Services

Telehealth services in health care span several types of technology, including:

- Telephone calls (synchronous)
- Digital, real-time audio and video calls (synchronous)
- Digital, store-and-forward audio and/or video calls (asynchronous)

Technological Requirements

New Medicare expansions for audiology services require use of HIPAA-compliant, real-time audio and video conferencing (HHS, 2021a and 2021b). Other technology, such as telephone and store-and-forward, are not payable by Medicare when used for covered services provided via telehealth, but may be covered by other payers under certain circumstances. Practitioners should reference payer-specific telehealth guidance to determine to which technology telehealth coverage has been extended.

Place-of-Service (POS) Codes

- **POS Code 11**—Office is the primary POS code used for typical face-to-face procedures provided by audiologists. Current convention is to report Code 11 when providing telehealth services to assure similar rates to in-person services. Payers may also require a modifier to be added to the procedure code (see next section, Telehealth Modifiers).
- **POS Code 02**—Telehealth is a POS code used to indicate services provided through a telecommunications system. We do not recommend reporting the POS Code 02. Instead, Medicare asks practitioners to report the POS Code 11—Office and append the -95 (Telehealth) modifier to current procedural terminology (CPT) codes representing the remote services performed. However, other payer-specific policies may recommend the use of POS Code 02.

Telehealth Modifiers

Certain payers may require practitioners to append modifiers when reporting clinical services provided via telehealth.

- **Modifier -95**

  This modifier indicates that services were provided synchronously (in real time) over a HIPAA-compliant communication technology. The modifier is commonly used by Medicare alongside POS Code 11 for reporting clinical procedures performed via synchronous telehealth.

- **Modifier -GT**

  This modifier indicates that services were provided synchronously (in real time) over a HIPAA-compliant communication technology. Medicare no longer uses this modifier to indicate telehealth services, but some payers may ask for reporting of this modifier in lieu of the modifier -95.

CODE	DESCRIPTOR
92550	Tympanometry and reflex threshold
92552	Pure-tone audiometry air
92553	Pure-tone audiometry air and bone
92555	Speech audiometry threshold
92556	Speech audiometry threshold with speech recognition
92557	Comprehensive hearing test
92563	Tone-decay hearing test
92565	Stenger test pure tone
92567	Tympanometry
92568	Acoustic reflex testing, threshold
92570	Acoustic immittance testing (tympanometry, acoustic reflex threshold, and acoustic reflex decay testing
92587	Evoked auditory test limited
92601	Diagnostic analysis of cochlear implant, patient <7y, initial programming
92602	Diagnostic analysis of cochlear implant, patient <7y, subsequent reprogramming
92603	Diagnostic analysis of cochlear implant, patient ≥7y, initial programming
92604	Diagnostic analysis of cochlear implant, patient ≥7y, subsequent reprogramming
92625	Tinnitus assessment (includes pitch, loudness matching, and masking)
92626	Evaluation of auditory function for cochlear implant candidacy or postoperative status of a surgically implanted device(s); first hour
92627	Evaluation of auditory function for cochlear implant candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes

EFFECTIVE: March 30, 2021

STATUS: Temporary addition for the public health emergency (PHE) for the COVID-19 pandemic. Not proposed for extension beyond the declaration of the PHE (per publication of the proposed rule on the CY 2022 Medicare Physician Fee Schedule).

When reporting these codes to Medicare, the POS Code 11—Office should be used with the modifier –95 to indicate provision via telehealth.

TABLE 1. List of Audiology Telehealth Services Payable through Medicare (latest update from Medicare: March 30, 2021)

- **Modifier -GQ**

This telehealth modifier may be used by specific payers under certain circumstances. Required usage of this modifier has become rare in recent years, as reporting conventions have evolved.

Codes Added to Covered Telehealth Services: Medicare

TABLE 1 presents a list of audiology services payable through Medicare when provided via telehealth. When reporting these codes to Medicare, the POS Code 11—Office should be used with the modifier –95 to indicate provision via telehealth.

Self-Pay

When insurance does not provide coverage for certain services when provided via telehealth, practitioners are able to seek reimbursement directly from the patient.

Practitioners should:

1. Establish a fee schedule for telehealth services offered and
2. Use transparency in billing patients for services provided.

Telehealth Audits

Practitioners should comply with all requirements for the provision of telehealth services. The increased adoption of telehealth services means the Department of Health and Human Services (HHS) Office of Inspector General (OIG) has increased its review of telehealth services provided under the Medicare and Medicaid programs. In addition, primary resources and guidance regarding HIPAA compliance can be found on federal government websites (HHS, 2021a and 2021b).

Please contact the Academy's Coding and Reimbursement Mailbox (reimbursement@audiology.org) with questions regarding the provision of services by telehealth.

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Anna Marie Jilla, AuD, PhD, is a clinical and research audiologist at the University of Texas Health Science Center at Houston in Houston, Texas, and currently serves as the chair of the Academy's Coding and Reimbursement Committee.

DISCLAIMER

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References

Audiology and Speech-Language Pathology Interstate Compact (ASLP-IC). (2021) https://aslpcompact.com (accessed July 15, 2021).

Centers for Medicare and Medicaid Services (CMS). (2021) Audiology Codes List. www.cms.gov/Medicare/Billing/TherapyServices/Downloads/Audiology_Codes.pdf (accessed July 15, 2021).

Chakrabarty S, Jilla A, Miller E. (2020) Specialty Series: Telehealth. *Audiol Today* 32(5):56–62.

Department of Health and Human Services (HHS). (2021a) HIPAA and COVID-19. www.hhs.gov/hipaa/for-professionals/special-topics/hipaa-covid19/index.html (accessed July 15, 2021).

Department of Health and Human Services (HHS) (2021b) HIPAA Administrative Simplification Regulation Text 45 CFR Parts 160, 162, and 164. www.hhs.gov/sites/default/files/ocr/privacy/hipaa/administrative/combined/hipaa-simplification-201303.pdf?language=es (accessed March 12, 2021).



AUDIOLOGY ADVOCATE

Advocating for the Critical Role of the Audiologist: Medicare, OTC, and Beyond

By Susan Pilch

There are a myriad of issues facing the profession of audiology—updating the classification and role of the audiologist in Medicare, the advent of over-the-counter (OTC) hearing aids, and implementation of the interstate licensure compact. The critical issue at the heart of each of these topics is ensuring that the value of the audiologist in creating optimal patient outcomes in hearing and balance health care is appropriately recognized and reflected in federal and state legislation and policy.

Medicare Modernization: Recognition of Audiologists as Experts in Hearing and Balance Care

The top legislative priority of the Academy is securing the passage of the Medicare Audiologist Access and Services Act (MAASA). This legislation enjoys bipartisan support in both the House and Senate and was first introduced in the last Congress (116th).

The Academy worked with the American Speech-Language-Hearing Association

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(ASHA) and the Academy of Doctors of Audiology (ADA) to draft the legislation and continues to collaborate with both groups to lobby to advance the bill.

This legislation would "modernize" the way Medicare classifies and approaches the profession of audiology, something that has not been done since the advent of the Medicare program in 1965.

Audiologists are still classified as "suppliers," and this effectively limits the amount and types of services that audiologists can provide to beneficiaries. Also, beneficiaries still must obtain a physician order to see an audiologist, a barrier not imposed by virtually any other public or private payer. This legislation would reclassify audiologists as "practitioners," allow them to provide and be reimbursed for both diagnostic AND treatment services, and remove the physician-order requirement.

It is important to note that this legislation would not add any new services to Medicare. Rather, audiologists would be able to provide and be reimbursed for the services that they are the experts in—hearing- and balance-related care. These services are currently being provided to beneficiaries by other Medicare providers that do not have the education or the breadth of experience to provide these services at the highest level.

President Biden has identified Medicare modernization as one of the top health-care priorities for his Administration, in recognition of the fact that Medicare overall has not kept pace with other public and private payers. The Administration has also spoken in favor of allowing non-physician health-care providers to practice "at the top of their license" and removing barriers to care.

The Hearing Aid Landscape: Audiologist as Patient Guide and Advocate

Latest reports indicate that proposed regulations designed to implement the new class of over-the-counter hearing aids may be released in September or October of 2021.

Under the provisions of the enacted legislation—The Over-The-Counter Hearing Aid Act of 2017—this new class of devices is designed for those patients with mild to moderate hearing loss. This legislation was enacted with the goal of making these devices more affordable to a greater number of persons.

Any effort to lower cost and improve access to hearing aids is an admirable goal. However, some would argue that this effort may oversimplify the treatment and management of hearing loss and prove overwhelming to patients trying to navigate the landscape of OTC, direct-to-consumer (DTC), and traditional hearing aids.

While some information outlets seem to imply that the OTC category cuts back on the need for the expertise of an audiologist, the reverse is true. Patients will need the guidance of an audiologist to determine the option best for them and to help them use that device to achieve the most favorable outcome.

Since the passage of the OTC hearing aid legislation in 2017, the Academy has sustained an active role (www.audiology.org/advocacy/legislative-and-regulatory-activities/federal-affairs/over-the-counter-and-direct-to-consumer-hearing-aids/) in monitoring the development of the FDA regulations. The Academy submitted comments to

the Food and Drug Administration (FDA) to help in the drafting of the regulations and the Academy also participated in a collaborative effort with other groups to develop the consensus paper titled "Regulatory Recommendations for OTC Hearing Aids: Safety and Effectiveness." (www.audiology.org/hearing-associations-release-consensus-recommendations-for-new-over-the-counter-hearing-aid-classification/).

The Academy has consistently maintained a position and has advocated that the availability of OTC hearing aids does not replace the role of the audiologist and the importance of a comprehensive hearing assessment conducted by an audiologist to discern the cause of hearing loss and to identify the appropriate remedies.

The ASLP-IC: Modernizing the State Practice of Audiology Through Interstate Practice and Telehealth

The Audiology and Speech Language Pathology Interstate Licensure Compact (ASLP-IC) is now operational and as we go to press, 13 states have joined the compact. This interstate licensure compact is similar to what exists for other professions such as nursing and physical therapy. Individual audiologists residing in a compact state may apply for a privilege to practice in another compact state. This will allow them to provide services in that state, both in person and via telepractice.

The increasing popularity of these professional compacts reflects changing attitudes toward professional licensing, with an emphasis on license portability and recognizing the value of telepractice in optimizing patient access to care.

The Academy has supported the ASLP-IC from the drafting stage onward and is now involved in facilitating the creation of the Compact Commission, an entity that will oversee the administration of the compact, moving forward.

Audiologist Advocacy Action Items

In the midst of these shifts in the healthcare marketplace, it is more important now than ever for audiologists to continue to educate policymakers and the general public about their areas of expertise and how that knowledge base can empower patients to realize the best possible outcomes with regard to their hearing and balance care.

Individual audiologists must reach out to their federal representatives to advocate for changes in Medicare, educate policymakers and patients about the value they bring to evaluating hearing loss and identifying the best treatment options, and advocate for the adoption of state legislation to implement the ASLP-IC.

Start today by accessing the Academy's Legislative Action Center at www.audiology.org/advocacy/legislative-action-center/ to send a pre-drafted message to your federal representative encouraging them to support MAASA!

Susan Pilch, JD, is the Academy's senior director of government relations.



PUBLIC AWARENESS

October Is National Audiology Awareness Month: A Personal Call for Action

By Judy Huch

As a past member, and now current chair, of the Academy's Public Awareness Committee, I want to share my story and thoughts about how I help to spread the word about hearing-health care and audiology—and how you can, too.

While I know this last year or two has been challenging for many of us, we need to work together, remain strong, and continue to advocate for our profession and for the best care of the patients we serve.

My Story

I have had the privilege of being an audiologist for 30 years and have experienced every season in this industry. There are topics that have remained the same, one of which is advocacy (raising audiology to the level of star status in the medical field and top of mind for those we serve).

I have worked in private practice (except for an ear, nose, and throat (ENT) internship) and I purchased my own practice within five years of graduating with my master's degree in the 1990s. As a working mother, I raised two sons while running my practice. I realize there were years where I felt I was successful if, by the end of the week, my kids were alive and I was able to make payroll.

I have been through struggles in this profession, but I hope to continue bringing ideas from others so we can take up the mantle of audiology advocacy in whatever capacity we are able to in the moment. As I have developed my leadership skills, I continue to put things through the filter of love and legacy as we move our profession forward.

How You Can Help

In the past, we have gotten close to national legislation, but we keep singing this song with each new Congress. This year, the Medicare Audiologist Access and Services Act (MAASA) provides an opportunity for all of us, at a minimum, to write to our members of Congress to garner support. The Academy has a dedicated site to make it easier to reach out (www.audiology.org/advocacy/legislative-action-center/).

Using the Legislative Action Center (LAC) enables you to put your voice directly toward the issues the Academy is monitoring and working for on behalf of audiology. As a member of the profession, you can use the LAC to contact your local representative and make sure they're focused on any issue that is important to you.

Put It Into Words

Why should we push this initiative? We should push it for autonomy, to make clinical decisions for our patients independently and directly without a referral from their physician. Changing our designation from diagnostician to practitioner would allow us to practice in our full scope, as outlined in our state.

After you write the support letter, connect with your elected representative's office to meet and plead our case. No matter what the outcome, send a hand-written thank-you note to the staff and the elected representative for their time.

All three national organizations (the Academy, the American Speech-Language-Hearing Association (ASHA), and the American Doctors of Audiology (ADA)) have resources for you to connect and make this happen. But, if you don't have time beyond the letter, you can always support the Academy political action committee (PAC) to support this important legislation.

Join a Committee

Connect with other passionate professionals as a volunteer on a national level, and more importantly, on your state level. I do not understand why there are individuals in our specialty who will complain, but will never step up to help fix the problem. Volunteer when you have the time and energy to give to volunteering.

The Academy has several open committees each year, which you can select based on your expertise and skill set. Visit www.audiology.org and search the keywords "volunteer" for Academy opportunities or "state organizations" for opportunities on a more local level.

Add Your Value

When my boys were living at home, I struggled to find time to do all I felt I needed to do. I found ways to help the profession, such as writing for Hearing Health and Technology Matters (HHTM), of which I was a founder. I had to block time off in my schedule to write.

Consider giving 30 to 60 minutes a week to your state organization. Paying your state fees goes a long way, but that is only a drop in the bucket.

If you want your state or national organization to lobby for audiology, this will take a lobbyist or, at minimum, a health-care lawyer. A part-time lobbyist can cost $30,000

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to $40,000 annually and a full-time lobbyist can cost upward of $70,000 to $150,000 a year, depending on where you are in the United States. There are several states that combine resources with other medical or health-care disciplines and organizations.

I have no idea how much a person works behind the scenes, unless they are in Arizona. I do know that, in my state, about five percent of all licensed audiologists are active in any capacity on the state level.

Many of our state organizations have committees to help, as well. Hot topics right now are third-party payers and state legislation issues. State rules/regulations and statutes must be well understood. Networking with other stakeholders in the state is needed to identify those who will either help or potentially block a better scope of practice for audiologists.

Connect with Positivity

Although social media has brought many of us together, it can also give us a view of a rabbit hole of negativity and a blame game. We are all interested in the same goal—the health of audiology as a profession. By following social media accounts related to the profession, we can stay focused on new developments in advocacy and coding and reimbursement that affect our careers and everyday lives. Stay in touch with peers by connecting on Facebook, LinkedIn, or through the various groups on the Academy's Audiology Community.

Talk It Up!

Give educational talks in your local area. So many of us do this, but we need to take it further by reporting what we have done to our state and national organizations so they can amplify our efforts. I know the presidents of the Academy and the ADA are being interviewed several times a month. Are you reading our professional organizations' emails, social media posts, and news releases? Are you engaging and spreading the good?

Give back and shout out the love. Many audiologists work to give back with free school screenings, hardship fittings/services, humanitarian work, and volunteering in other areas. If you are not comfortable with telling the world what you are doing, ask a coworker or friend to do it for you. This is not WHY you are doing this, but it does show the world that a fantastic group of professionals wants to move people to a better life though communication.

I know there is not always the time. I know there were times I felt I needed to be home with my kids. I know I needed to travel home to be with my aging/dying parents. I have been there. But, if not you, then who?

If we continue to wait for someone else (organizations included) to fix our problems, then we will get an answer that is not in our best interest because the ones who stepped up did it for theirs. This can lead to a winter of discontent, because we didn't do our part.

Judy Huch, AuD, is an audiologist at Oro Valley Audiology in Arizona. Dr. Huch is on the Board of the Arizona Audiology Coalition and is chair of the Academy Public Awareness Committee.

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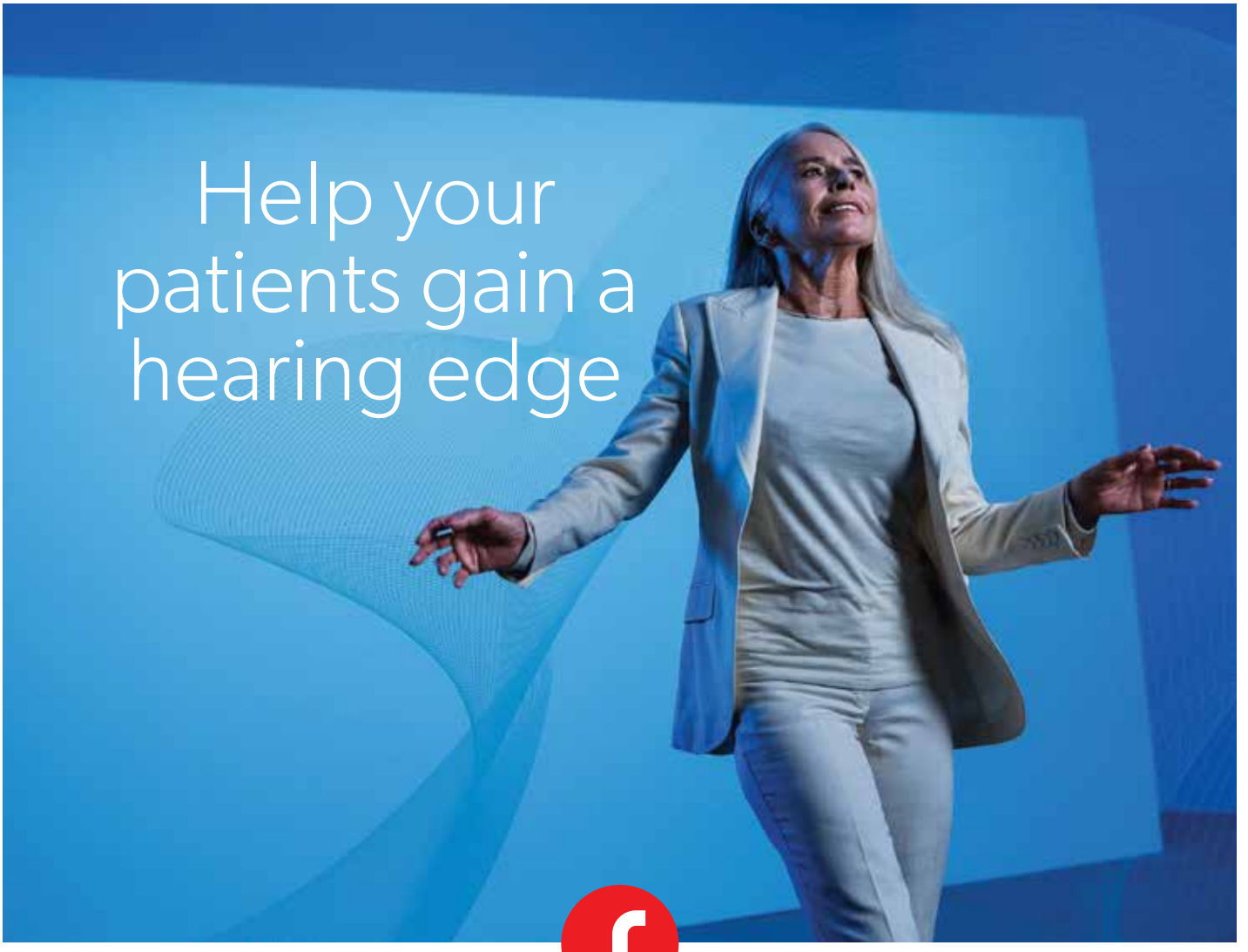
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