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Audiology PRACTICES



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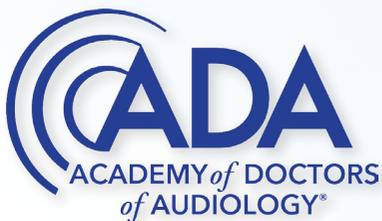
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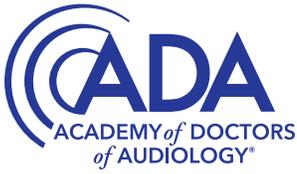


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EDITOR

Brian Taylor, Au.D.

brian.taylor.aud@gmail.com

MANAGING EDITOR

Stephanie Czuhajewski, MPH, CAE

sczuhajewski@audiologist.org

GRAPHIC DESIGNER

Janet Roy

ADVERTISING

Stephanie Czuhajewski, MPH, CAE

sczuhajewski@audiologist.org

HOW TO REACH US

ADA Headquarters

1024 Capital Center Drive, Suite 205

Frankfort, KY 40601

Phone: 866.493.5544

Fax: 859.271.0607

www.audiologist.org

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Audiology Practices (USPS 025-476) ISSN (21645248) is published quarterly by the Academy of Doctors of Audiology, 1024 Capital Center Drive, Suite 205, Frankfort, KY 40601. Periodicals Postage Paid at Lexington KY and at additional mailing offices. Subscriptions are \$25 as part of membership dues. POSTMASTER: Send address changes to *Audiology Practices*, 1024 Capital Center Drive, Suite 205, Frankfort, KY 40601.

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Changing and Evolving to Meet the Future of Patient Care

I've always loved how the seasons change throughout the year because I feel like life would be boring without those changes. (I also like roller coasters.) And our profession also has had seasons and we are changing with the times while you as the practitioner are evolving and changing the ways you care for your patients. Like seasons (and rollercoasters), we can find ourselves repeating ourselves repeating what we've done in the past or remembering that the storm doesn't last forever. Over the years we have changed from paper billing and paper charting to electronic. Some of us remember the industry uproar and pushback from the patients when we wanted to fit digital products and move away from analog technology. We prepared for the changes as best we could by tweaking our patient protocols. Sometimes these seasons of change bring us opportunities for more services to create a larger offering for our patients.

No one really truly enjoys change, but it is possible to make the little adjustments over time, and gradually they can make huge impacts on how your office runs. We have a recession on the horizon, and many of us are looking for positive ways to prepare. At the end of the day, looking back at what you created for the good of the patients and the health of your program is the best part!

In this edition of *Audiology Practices* we have excellent topics that help you help more patients including

- Promoting Hearing Health Literacy in the Medical Community
- Educate and Obligate: A Physician Outreach Case Study
- Treating Tinnitus across a Broad Patient Population
- Insights on Operating a Balance Center
- Reader reactions to A New Analysis of the Audiology Workforce

And as changes are occurring around you, the medical community should be updated through your lens and by you, not from the nightly news or general articles. I love the article in this edition that discusses promoting hearing health literacy in the medical community, as well as the physician outreach case study. You truly are the expert in the area of hearing, tinnitus, and balance disorders and it is your job to educate your community about hearing health. This is definitely an on-going initiative that requires meeting with physicians and allied health professionals and educating them about the importance of helping their patients improve their hearing. Unfortunately, because there are negative stigmas around hearing loss, many of these professionals may have false beliefs about hearing health solutions—and the importance of hearing health. It is our job to tell them the positive stories

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Welcome to the Academy of Doctors of Audiology (ADA), the only national membership association focused on ownership of the audiology profession through autonomous practice and practitioner excellence as its primary purposes. ADA is the premier network and resource for audiologists interested in private practice.

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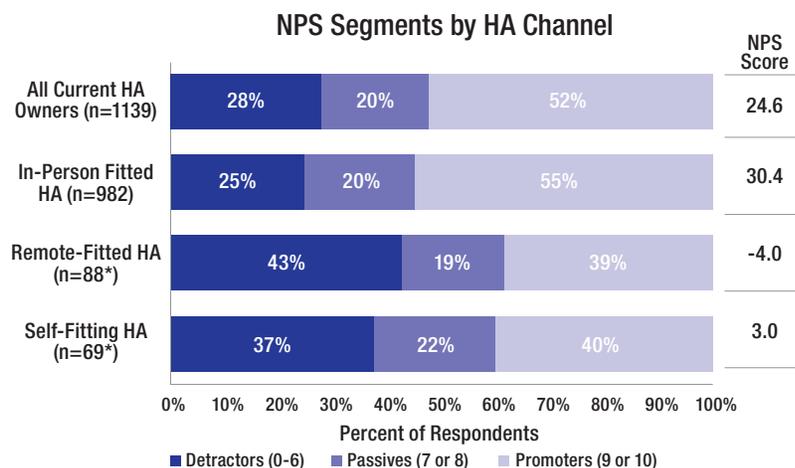
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Just a Little of that Human Touch: In-Person Care Drives Highest Net Promoter Score

MarkeTrak (MT) 2022, the latest version of the recurring survey of hundreds of hearing aid owners, provides several data-driven insights that audiologists can apply to patient care. Among the numerous actionable findings are these: 1.) Hearing aids improve the quality of life (QofL) and the likelihood that someone will report these QofL improvements is directly related to the type of technology found in their hearing devices. Specifically, wearers with these three newer advanced features: rechargeable batteries, downloadable apps, and wireless streamers (for the television or a companion microphone) tend to report higher levels of satisfaction. 2.) Hearing aid wearers, regardless of how they acquired their devices, (in-person, remote or self-fit) all report high levels of satisfaction. Individuals who acquired their devices in-person, however, are significantly more loyal than those who purchased their devices through another channel (remote or self-fit). Consequently, individuals who experienced in-person care are more likely to actively spread positive word of mouth about the support they received from the audiologist.

Used by businesses around the world for more than 20 years, the Net Promoter Score (NPS) is a popular metric of customer loyalty. The basic idea of the NPS is that loyal customers not only buy again from the same business, but through their positive word of mouth they actively promote the business to others. The NPS measures the response to the question, “how likely are you to recommend the products and services of this business.” Using a 1-10 scale, the NPS is the difference between those customers who report that they will “highly recommend this business,” which is 8-10 on a comment card, compared to other customers who report that they are “indifferent” or “unlikely to recommend this business,” a 1 to 7 on the comment card. The difference between these two groups is the NPS.



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AHIP 2023 Medicare, Medicaid, Duals & Commercial Markets Forum Recap and Learnings

On March 14-16, I had the opportunity to attend the Medicare, Medicaid Duals & Commercial Markets Forum (Forum), sponsored by America's Health Insurance Plans (AHIP), which represents more than 1,200 companies that offer health insurance policies to more than 200 million Americans.

The Forum, hosted in Washington D.C. featured sessions led by high-ranking federal and state government officials, leading health insurance actuaries and analysts, and advocates (like me) seeking improved access to care for beneficiaries and improved reimbursement processes and policies for providers. AHIP sessions focused on CMS policy priorities and health plan implications, Medicare Advantage regulatory updates, and emerging issues in the employer, individual and small group commercial insurance markets.

Key takeaways from the AHIP Forum:

- Decisions about health benefit design are fragmented and often made at the plan level (if you have seen one health insurance plan, you have seen one health insurance plan).
- When it comes to supplemental benefit plans for hearing, vision, and dental, a turnkey third-party administrator (TPA) approach is very attractive to health plan sponsors.
 - » One of the biggest challenges in the structuring of the plan and benefit design (for plan sponsors) is recruiting and maintaining providers and provider networks (audiologists, optometrists, dentists) for the specialty services.
 - » When TPAs can bring a ready-made, established provider network it is a key selling point (it is more important, according to those I spoke with, than any other administrative functions undertaken by the TPA).
 - » Therefore, the TPA is only as valuable as the network of providers that it attracts and maintains (if providers refuse to participate with a TPA, the TPA is no longer a valuable partner for the plan sponsor).
- Salespeople, actuaries, sponsors, and other stakeholders at the plan level do not have a good working knowledge of the structure of their plan partners (for example, a health plan contracting with a TPA would not know, wonder, or consider asking whether the TPA is owned by a hearing aid manufacturer, and/or whether it owns audiology/hearing aid clinics).
- There are tremendous opportunities for ADA and ADA members to inform and educate health insurance plan sponsors about the important role that audiologists play in health care delivery,

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Treating Tinnitus

across a Broad Patient Population
Requires Multiple Management Options

Beyond Just Hearing Aids

Caroline Hamilton, BSc (Audiology), MSc (Neuroscience)

Anita Sayers, BSc (Physiology), MSc (Audiology)

Helen MacMahon, BA (Deaf Studies), MSc (Audiology)

Tinnitus is the perception of sound in the absence of an external acoustic stimulus. Tinnitus is associated with hearing loss, and thus, hearing aids are considered as a management option for tinnitus. Hearing aids are often the only option provided for tinnitus patients in a clinical setting; therefore, it is interesting and instructive to examine the patient treatment pathway in a clinic with multiple tinnitus management options available. Analyzing the results of 297 patients in a clinical setting where a range of options are available for tinnitus treatment, including hearing aids, neuromodulation, and tinnitus therapy in the form of cognitive behavioural therapy (CBT), there was a considerably low uptake of hearing aids compared to the other treatment modalities that were offered to the patients. This article discusses how and why patients do not opt for hearing aids when provided with multiple tinnitus management options.





Tinnitus and hearing loss; hearing aids as a tinnitus management option

Tinnitus is the perception of sound in the absence of an external acoustic stimulus^{1,2}. Research indicates a correlation between hearing thresholds and tinnitus, with 85-90% of tinnitus sufferers experiencing varying degrees of hearing loss³⁻⁶. It is for this reason that hearing aids often serve as a management option for those experiencing tinnitus. However, there are also limitations associated with this treatment pathway for tinnitus,⁷⁻⁹ found in a scoping review of evidence on hearing aids for tinnitus that due to the variability in the quality of evidence (out of the 28 primary research studies that were selected), no consensus was reached in relation to the use of hearing aids as a treatment for tinnitus. While 68% of the studies demonstrated some positive results of hearing aids for tinnitus relief, they showed variability across tinnitus patients. However, 14% of studies demonstrated no change in tinnitus perception. Also noteworthy is that hearing aid compliance may be affected by loudness discomfort and lack of motivation¹⁰.

Low uptake of hearing aids in a tinnitus clinic that provides multiple tinnitus management options

Data were collected from 297 tinnitus patients who sought help at the Otologie Tinnitus Care Clinic in Dublin, Ireland, which provides multiple tinnitus management options. Based on their audiological test results, the options that were recommended to the patients included hearing aids, tinnitus therapy in the form of cognitive behavioral therapy, and

neuromodulation in the form of the *Lenire* bimodal stimulation treatment manufactured by Neuromod Devices (device combines sound and electrical tongue stimulation). Prior to the audiological assessment, patients were asked if they believed they had a hearing loss. While 48.8% of respondents answered yes to this question, results of audiological assessments available for 237 patients, indicated that 81% had an actual objective hearing loss. The mean age of the patients within the normal hearing level category was 39.2 years while the mean age of patients with at least a mild hearing loss in the worse ear was 56.6 years. This information highlights a cohort of patients younger in age with tinnitus and within the normal hearing category. While patients in this group may not require amplification at this point, hearing aids may be an option in the future. Based on their audiological and tinnitus profile, as well as a detailed patient history that focused on both their hearing loss as well as their tinnitus, patients were then advised regarding the most 'suitable' treatment option. Some patients were deemed suitable for more than one treatment (i.e., *Lenire* and hearing aids). Following discussion with each of the patients regarding treatment options and prioritizing what was most bothersome to them (i.e., their hearing loss or their tinnitus), 64.7% of the overall cohort of patients were 'referred' on for *Lenire* treatment, 26.3% for tinnitus therapy and 8.4% (25 patients) for hearing aids. These patients who were recommended hearing aids had sufficient hearing loss and difficulties in their daily lives to justify hearing aids. However, only eight of these 25 patients actually purchased hearing aids to treat their tinnitus, representing a very small percentage (~3%) of all 297 patients that came into the clinic seeking tinnitus treatment.

85-90%

of tinnitus sufferers
experience varying
degrees of hearing loss.

Discussion

Although historically many tinnitus patients have some form of hearing loss, it was surprising to observe that those actually seeking treatment for their tinnitus were not typically those with sufficient hearing loss to be recommended for a hearing aid. Furthermore, of those who were recommended a hearing aid for tinnitus treatment, only a few purchased devices.

The very low adoption of hearing aids in a tinnitus clinic can be attributed to a number of different factors. Although tinnitus is highly correlated to hearing loss, there are many tinnitus patients whose hearing loss does not cause them concern or impact them to the point where they require amplification. Although hearing aid technology has evolved over the last number of years and many devices include updated tinnitus-specific features, tinnitus patients are often unmotivated to use hearing aids that are originally designed to address hearing loss or are influenced by the taboo towards them^{11,12}.

Another aspect to take into consideration is that tinnitus is a condition that is heterogenous in nature with variations

occurring in auditory perception, risk factors, comorbidities, and impact on quality of life^{13,14}. The auditory perception of tinnitus presents itself in myriad forms with variation occurring in the location, frequency, tone, and intensity of the sound¹⁵. The impact of tinnitus on quality of life is wide-ranging and habituation to the sound may occur. It is also noted that tinnitus leads to varying susceptibility to psychological factors, such as depression and anxiety, as well as impairment across functional and cognitive abilities¹⁶⁻¹⁸. Due to the wide variation and heterogeneity seen in individuals with tinnitus, it is recommended that different tinnitus management and treatment options are provided to reflect this diversity.

Considering that many tinnitus patients are not interested or are not needing to purchase a hearing aid to treat their tinnitus, and due to the heterogenous nature of how tinnitus affects different patients, it is important for hearing clinics to provide multiple treatment options beyond just hearing aids, such as CBT and neuromodulation treatments to help a much larger and diverse patient population suffering from tinnitus. ■



68%

of the studies demonstrated some positive results of hearing aids for tinnitus relief, but they showed variability across tinnitus patients.



References

1. Baguley D, McFerran D, Hall D. Tinnitus. *Lancet*. 2013;382(9904):1600-1607.
2. Sirh SJ, Sirh SW, Mun HY, Sirh HM. Integrative Treatment for Tinnitus Combining Repeated Facial and Auriculotemporal Nerve Blocks With Stimulation of Auditory and Non-auditory Nerves. *Frontiers in Neuroscience*. 2022:247.
3. Bhatt JM, Lin HW, Bhattacharyya N. Prevalence, severity, exposures, and treatment patterns of tinnitus in the United States. *JAMA Otolaryngology-Head & Neck Surgery*. 2016;142(10):959-965.
4. Nicolas-Puel C, Akbaraly T, Lloyd R, et al. Characteristics of tinnitus in a population of 555 patients: specificities of tinnitus induced by noise trauma. *International Tinnitus Journal*. 2006;12(1):64.
5. Savastano M. Tinnitus with or without hearing loss: are its characteristics different? *European Archives of Oto-Rhino-Laryngology*. 2008;265(11):1295-1300.
6. Simonetti P, Vasconcelos LG, Gândara MR, Lezirovitz K, de Medeiros ÍRT, Oiticica J. Hearing aid effectiveness on patients with chronic tinnitus and associated hearing loss. *Brazilian Journal of Otorhinolaryngology*. 2022.
7. Jacquemin L, Gilles A, Shekhawat GS. Hearing more to hear less: A scoping review of hearing aids for tinnitus relief. *International Journal of Audiology*. 2021:1-9.
8. Kikidis D, Vassou E, Markatos N, Schlee W, Iliadou E. Hearing Aid Fitting in Tinnitus: A Scoping Review of Methodological Aspects and Effect on Tinnitus Distress and Perception. *Journal of Clinical Medicine*. 2021;10(13):2896.
9. Shekhawat GS, Searchfield GD, Stinear CM. Role of hearing aids in tinnitus intervention: a scoping review. *Journal of the American Academy of Audiology*. 2013;24(08):747-762.
10. Salonen J, Johansson R, Karjalainen S, Vahlberg T, Jero J, Isoaho R. Hearing aid compliance in the elderly. *B-ent*. 2013;9(1):23-28.
11. Ruusuvaori JE, Aaltonen T, Koskela I, et al. Studies on stigma regarding hearing impairment and hearing aid use among adults of working age: a scoping review. *Disability and Rehabilitation*. 2021;43(3):436-446.
12. Wallhagen MI. The stigma of hearing loss. *The Gerontologist*. 2010;50(1):66-75.
13. Cederroth C, Gallus S, Hall D, Kleinjung T, Langguth B, Maruotti A. Editorial: towards an understanding of tinnitus heterogeneity. *Front Aging Neurosci*. 2019; 11: 53. In:2019.
14. De Ridder D, Schlee W, Vanneste S, et al. Tinnitus and tinnitus disorder: Theoretical and operational definitions (an international multidisciplinary proposal). *Progress in brain research*. 2021;260:1-25.
15. Han BI, Lee HW, Kim TY, Lim JS, Shin KS. Tinnitus: characteristics, causes, mechanisms, and treatments. *Journal of Clinical Neurology*. 2009;5(1):11-19.
16. Meijers SM, Rademaker M, Meijers RL, Stegeman I, Smit AL. Correlation Between Chronic Tinnitus Distress and Symptoms of Depression: A Systematic Review. *Frontiers in Neurology*. 2022:791.
17. Park M, Kang SH, Nari F, Park E-C, Jang S-I. Association between tinnitus and depressive symptoms in the South Korean population. *Plos one*. 2021;16(12):e0261257.
18. Salazar JW, Meisel K, Smith ER, Quiggle A, McCoy DB, Amans MR. Depression in patients with tinnitus: a systematic review. *Otolaryngology-Head and Neck Surgery*. 2019;161(1):28-35.

Caroline Hamilton is the Global Director of Audiology at Neuromod Devices. **Anita Sayers** is the Head of Tinnitus Care at Otologie. **Helen MacMahon** is a Clinical Audiologist at Otologie.

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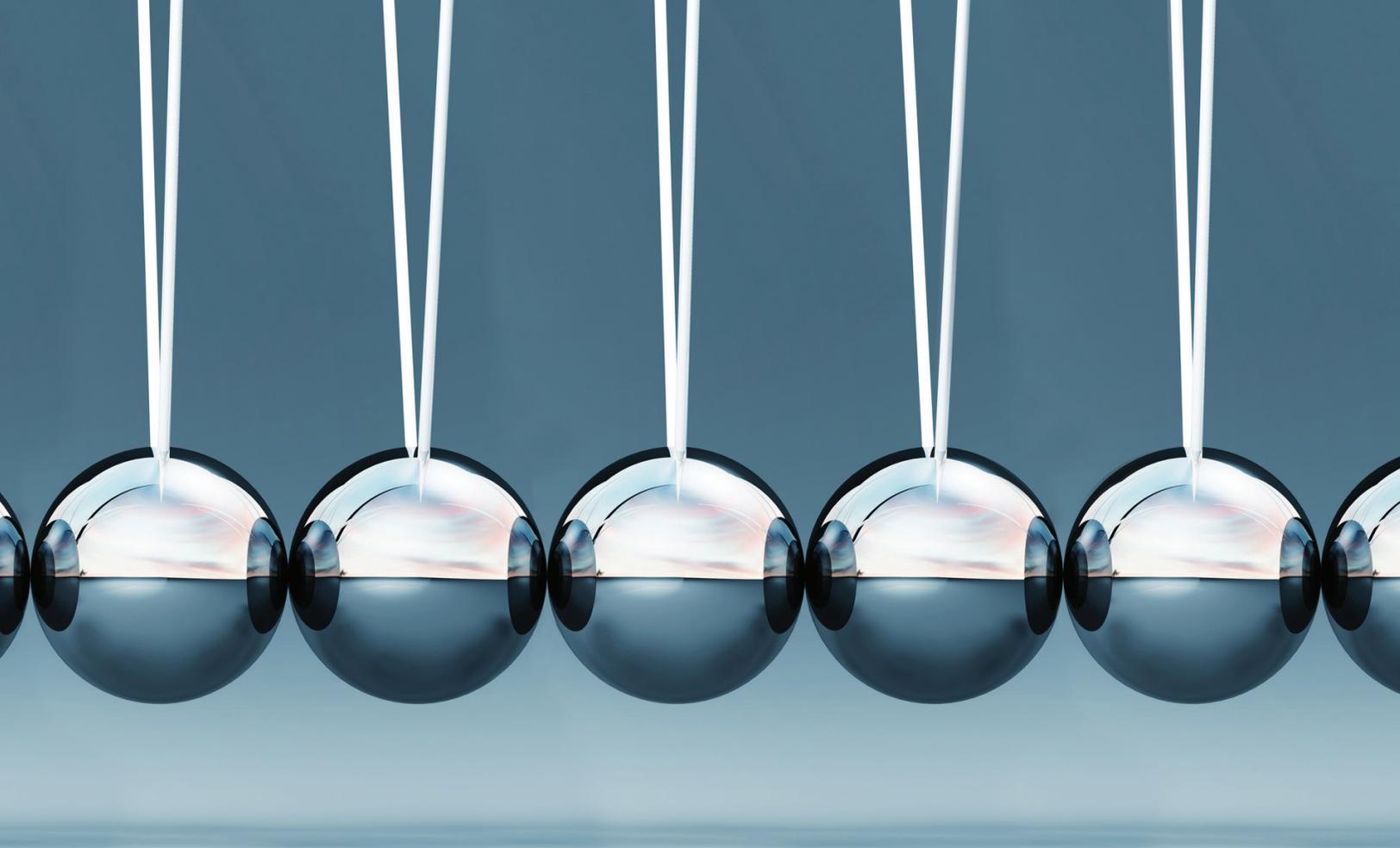
A Physician Outreach Case Study

Kelsey Rutis and Lisa Howell

From websites to online reviews, written blogs to video-heavy formats, print newsletters to special offer direct mailers, audiology practice owners and providers have a plethora of digital and traditional marketing tactics to consider when forming a strategic marketing plan.

To ensure the most cost-effective strategic marketing results for the highest possible return on investment, however, a well-balanced marketing plan built around multiple patient pathways is recommended. The strongest marketing plans and approaches ensure an appropriate allocation of financial and time resources, while utilizing psychographic and demographic research to guide and support marketing efforts. Of the pillars that make up a well-balanced marketing plan – brand impression, patient commitment, online presence, advocacy, direct response, and awareness – advocacy is a key pillar which helps motivate physicians and patients to be proactive about hearing health and to champion an audiology partner for their patients and loved ones. Physician outreach specifically is a comprehensive, and very manageable tactic that seeks to create long-term, mutually beneficial relations for the patient, audiology practice, and referring healthcare professional.

A well-balanced marketing plan built around multiple patient pathways is recommended.



For the audiology practice, an increased number of new patients is just one of the benefits. For referring professionals, the relationship can be important to their reimbursement structure. For the patient, it is an opportunity to have a holistic, preventative care network of knowledgeable healthcare providers.

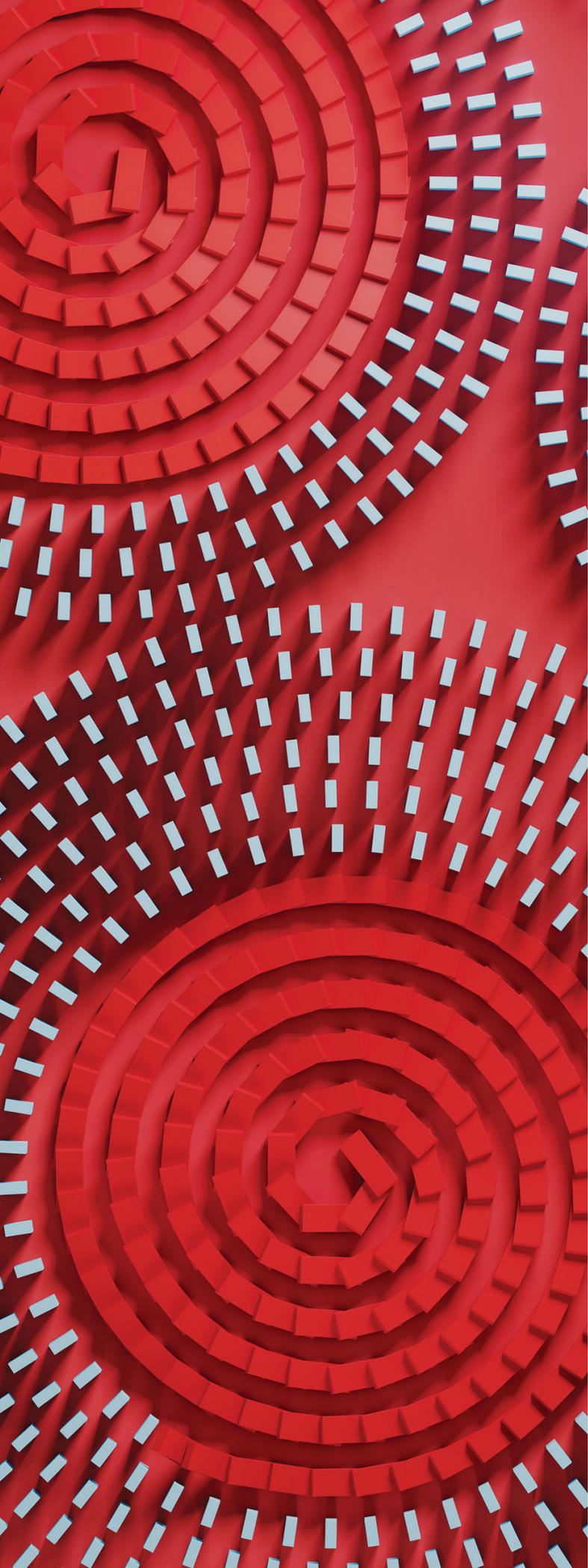
More than ever, practice marketing needs to be a multi-layered and dimensional approach to match and attract the attention of patients and intended audiences. Through repetition and consistency, marketing piques interest and creates a sense of need and familiarity for patients as well as referring professionals. By taking an educational approach and using published articles or writing unique pieces focused on educating physicians and other health care professionals, physician outreach is a low-cost financial marketing expense that involves an investment of time over monetary expense.

Through outreach, awareness, and relationship-building, an audiologist can become the trusted advisor, educating PCPs on comorbidities between hearing health and a growing list of associated diseases. Helping physicians better care for their patients allows the patients to lead healthier, fuller lives.

The objective of this case study is to educate the audience about on the benefits, opportunities, and challenges of physician outreach while providing items for consideration in launching and implementing this marketing tactic as part of a well-balanced marketing plan.

Scope of Challenge

For physicians, education on hearing impairment is frequently focused on basic anatomy and physiology of the hearing and balance organs due to pared curriculums. Few medical programs offer a rotation through an audiology clinic, thus reducing the physician's ability to gain additional knowledge that would help provide effective risk-versus-benefit patient counseling, or in many cases, knowledge of comorbidities. Through educational marketing, audiologists may facilitate increased patient access to audiology services, more effective treatment, and improved quality of life.



The main benefits of a consistent physician outreach strategy for an audiology practice are many, including:

- Seventy-three percent of the U.S. population talks to their primary care physician (PCP) about hearing loss before consulting anyone else, yet only 13-to-15 percent of PCPs test patients (*Tysoe, 2013*). When you develop a meaningful partnership with physicians, you're also planting the seed to grow meaningful relationships with their patients.
- With recent changes in over-the-counter distribution of hearing aids and online sales of personal sound amplifiers, physicians need to be aware of what the limitations of use are on those technologies to ensure that their patients are capable of accurately deciphering the differences, limitations of use, and benefits of varying technologies.
- Patient care is on the physician's top-priority list. When they are able to help serve their patients with the best care, they are in turn supporting their total body health.
- Physician outreach gives you another outlet to brand yourself as a community health care expert.
- Generally, it's more expensive to bring in a new patient with traditional marketing than it is with a physician outreach program. For example, it costs \$450 to \$550 for each new appointment through traditional marketing, whereas a physician outreach program is more of an investment in time.

Methods and Results

What to Know Before Beginning

Physician outreach is a critical marketing strategy for any audiology clinic looking to grow their revenue by increasing patient flow into the clinic. While the cost for materials is relatively low (handouts, brochures, etc.), the cost of time for consistent outreach can be a barrier to implementation for clinics. Before starting an outreach program, it is recommended that the practice identify an outreach point-person or 'captain' within the practice who can devote 1 – 3 hours per week to outreach. This can be a challenge for small practices with limited staff, or practices with full patient schedules. Utilizing block scheduling strategies can remedy some of these challenges.

When thinking about physician outreach, there are several factors to consider before beginning, including the following:

- What is the value to 1) patients and 2) referring professionals?
- What is the value of your practice vs other audiologists in the area?
 - » Why does this matter to the referring professional?
 - » Why does this matter to the potential patient?

The answer to these questions should be addressed as you are working on your style guide and brand story (you may have also worked on these elements with a human resources manager around the topic of attracting and retaining staff).

Preparing for Outreach

Physicians can be identified in several ways. The best first step is to evaluate physicians who have already referred to the audiology practice. The clinic should identify those with whom to build stronger connections and add them to the list. After reviewing current referrers, the practice can expand their search through online research using search engines and local healthcare directories to identify other physician referral targets.

The radius in which a practice does outreach varies by market. In a dense, urban market, the practice might only travel in a 1 – 2-mile radius. For more suburban or rural markets, it may be reasonable for patients to travel 10 – 50 miles to receive healthcare from their various providers. As a practice begins their outreach efforts, they need to identify where the majority of their patients live and travel from to assist in directing the scope of a physician outreach radius.

In addition to identifying the target list of physicians, the outreach captain should block schedule their time each week for in-person visits and follow-up calls. Visiting a list of 10 target physicians, requires scheduling time to visit 2 – 3 physician practices per week. Depending on the distance from the audiology clinic, this may take anywhere from 1 – 3 hours per week.

While the cost for materials is relatively low, the cost of time for consistent outreach can be a barrier to implementation for clinics.

In addition to the outreach visits, the audiology clinic should have a well-defined referral follow-up strategy in the clinic for when a physician does send referrals. It is recommended that this include sending a written report and audiogram to the physician within 48 hours. Additional touchpoints are recommended like follow-up calls to the physician’s office to detail the outcomes, and sending a handwritten thank you card for the referral, in addition to the written report.

Outreach and Communication Frequency

Plan monthly communications, touchpoints, and visits to the target list of physicians for 6 months. After the 6-month outreach period, evaluate the engagement with and referrals from physicians who have been visited. For those with good engagement in person, as well as those sending referrals, it is reasonable to keep them on the outreach list and continue visits for the next 6-month period. For those with low engagement in person and non-referrers, the clinic should consider removing them from the outreach list and adding new prospects to the list. As physician outreach is an investment of time, it is important to be realistic and keep the plan manageable. Between 5 and 10 practices in total is a great place to start for most practices most effectively manage their time for outreach.

Gather Materials

Effective outreach includes delivering materials with information on the services the audiology clinic provides as well as contact information for sending referrals. In addition, it is recommended that the practice determine a monthly theme for their outreach and deliver educational materials, like whitepapers and research studies on hearing loss and related comorbidities, to further educate the physician office. For physicians, nurse practitioners, and physician assistants, audiologists have the opportunity to be a resource on comorbidities, educating these healthcare professionals on the link between hearing loss and diseases such as dementia, diabetes, and cardiovascular health. With this information, referring professionals can enhance the overall health of their patient base, and they have the added benefit of potentially increasing their reimbursements from claims billed to Medicare funded plans.

In addition to comorbidities, audiology clinics may deliver educational materials related to hearing technology and other treatments. Bringing materials to help providers learn about issues affecting hearing health, like what to know about over-the-counter devices, can help them make appropriate referrals to an audiologist.

Discussion of Tactics

The audiology clinic should also keep record of their visits and referrals resulting from the outreach. This can be done simply in a spreadsheet.

Figure 1: Example Visit Tracking

Physician Name	Physician Group	Address	Phone	Email	Contact Person	Visit 1 Date	Visit 1 Materials	Visit 1 Notes
Dr. Joe Smith	ABC Physician Group	123 Main St, Anytown, USA	555.555.5555	referrals@ABCphys.com	Susan Johnson, Referral Coordinator	1/10/2023	Diabetes Comorbidity Whitepaper, Contact brochure	Met with Susan, added to referral database

Figure 2: Example Referral Result Tracking

Date	Patient Name	Canceled	Completed	No Show	Physician	Fit Date	Hearing Aid Units Sold	Revenue Collected	Notes
2/1/2023	Michael Jones		X		Dr. Joe Smith, ABC Physician Group	2/9/2023	2	\$6990	
2/3/2023	Cathy England	X			Dr. Mary Gonzalez, ABC Physician Group				

Many factors can impact the results beyond the initial outreach visit, such as the inbound call conversion by the front office staff, patient no-shows (appointment attrition), patient test results, and whether the patient adopts the recommended treatment protocol. Success from physician outreach should primarily be measured in the number of visits completed and the number of referrals sent by each physician, since these are factors that can be controlled by the person completing the outreach. Conversion beyond the initial referral sent should be handled through other measures, like coaching and training, operational processes, etc.

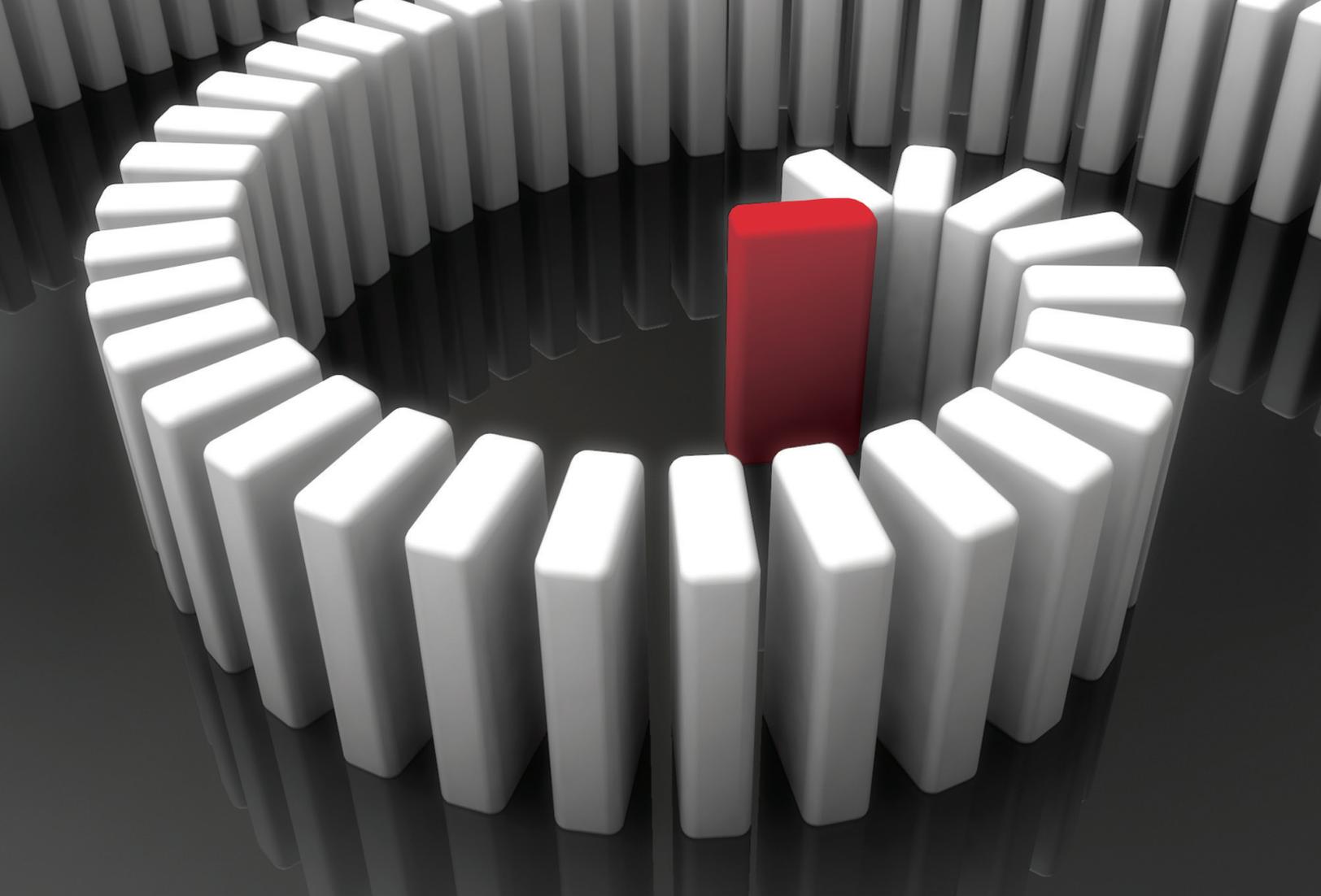
When evaluating outreach return on investment (ROI), it is important to take outreach program costs into account and subtract them from total revenue to assess the return on the investment. For most marketing efforts, a 300% or higher is recommended.

Two Important Considerations

Many factors impact the nature of physician referrals for hearing care today. Below is a discussion two of the most common factors.

Anti-Kickback Statutes

When implementing a physician outreach program, it is critical to be aware of the Anti-Kickback Statute (AKS). This statute is a federal regulation [42 U.S.C. §1320a-7b(b)] that “prohibits offering, paying, soliciting, or receiving anything of value to induce or reward referrals to generate Federal health care program business.”



This law limits the dollars that can be spent on physician gifts on an annual basis. This is seen as “remuneration” for inducing or rewarding physicians for referring to your practices. This includes any items of value beyond a \$300 per calendar year per physician practice. These items are limited to offering physician practices only unsolicited nonmonetary gifts (no cash or cash equivalents). It is HIGHLY recommended that practices track their dollars spent to each physician AND seek out local legal counsel regarding federal laws, and the laws of the state in which the practice is located.

Audiology clinics may consider sending thank-you gifts to their referring physicians or bringing gifts during their drop-off visits. It is critical that the amounts outlined in the AKS are considered and tracked as to not violate the statute.

Over-the-Counter Hearing Aids and Physician Outreach

In some cases, without an effective outreach and education program from the local audiology clinic, physicians don't have a full understanding of effective hearing treatment options. With recent FDA approval of over the counter (OTC) distribution of hearing aids and online sales of personal sound amplifiers, physicians need to be aware of what the limitations of use are on those technologies to ensure that their patients are capable of accurately deciphering the differences, limitations of use, and benefits of varying technologies. OTC hearing aids are only recommended for those with perceived mild to moderate hearing loss. One cannot effectively know their hearing loss without a diagnostic evaluation, so it is important

Without an effective outreach and education program from the local audiology clinic, some physicians don't have a full understanding of effective hearing treatment options.



that patients seek out a diagnostic evaluation before trying to self-treat their perceived hearing loss. Furthermore, using hearing technology can present challenges for patients with dexterity issues or an inability to manage the devices through a Bluetooth device, so a knowledgeable audiologist can be paramount to a successful hearing loss treatment plan. By reaching out to and educating the local physicians, a local audiologist can help more patients receive referrals for diagnostics prior to attempting to treat their hearing loss.

Meeting Physicians Where They Are

A mix of traditional mail, in-person visits, phone calls, digital outreach, and email are part of physician outreach and many professional referral marketing strategies. The main challenge for audiology clinics in regular physician outreach is dedicating the time needed to make substantive visits to local physician offices. The pandemic also added levels of complexity. While most industries and professional services have either returned to pre-pandemic ways of doing business or created new models for conducting business, many health care practices and facilities still have measures in place that make in-person drop-in visits challenging. There are many methods of developing relationships with referring primary care providers and referral care coordinators that do not involve in-person visits, though in-person strategies remain a critical component of outreach. As physician outreach is a marketing strategy in its own right, it should involve multiple tactics that build upon each other.

The Dollars and Cents

In the marketing of a practice, a mix of strategies and tactics is important to the immediate health and long-term success of a practice. Whereas tactics such as digital marketing play a key role in gaining immediate patient flow and filling schedules short-term, strategies such as physician outreach are about creating longer-term, and frequently some of the best-qualified, patient flow.

Generally, it is more expensive to bring in a new patient through traditional and some digital marketing than it is through a referral and relationship-based outreach program. Physician outreach is an investment of time and energy whereas other marketing tactics and efforts are monetary investments. For example, it costs upwards of \$525 for each new patient appointment through traditional marketing (newspaper inserts or ads, direct mail postcards, etc.).

A physician outreach return on investment (ROI) calculator tracked results collected from over 200 practices over the past 18 years. The data demonstrated the financial benefit of implementing a physician marketing strategy for an audiology practice. A practice with a plan based on 35 monthly connections to a targeted database of physicians could expect 6 referrals in a monthly period (17% referral rate). If half of those referred patients are then found to have treatable hearing loss, and the practice has proven history of 1.3 of those treatable patients adopting hearing aids (effectiveness ratio per patient is 2.0, based on two

Physician outreach is an investment of time and energy whereas other marketing tactics and efforts are monetary investments.

ears being fitted), the practice could dispense four hearing aids per month just from having built a consistent, long-term physician outreach program. Assuming these referrals result in private pay hearing aid sales in a bundled pricing model at an average selling price of \$2,500 per unit, the practice would yield just over \$10,000 in monthly revenue. Of course, these projections can vary considerably, depending on factors such as average per unit selling price and the business model of the practice.

Becoming a Trusted Advisor

Through outreach, awareness and building relationships, an audiologist can become a trusted advisor, educating primary care physicians on many challenges related to patient hearing health, including but not limited to technologies and comorbidities to help these physicians better care for their patients.

Physician outreach is a longer-term marketing strategy focused on building relationships with referring healthcare professions. Whereas other types of marketing are more frequently focused on quick turn gains or flow through short messaging or branding on ads, through pay per click, or online reviews, communications with and marketing to referring professionals such as physicians and their staff is about build trust through consistency, repetition, and education. By providing data-driven information relating hearing health, audiologists can become a trusted advisor to other medical professionals.

Benefits to the Referring Physician

The benefits of regaining hearing are not just for the patient and their loved ones. The referring physician will ultimately benefit as well through potential improved communication with their patient and better information retention due to improved hearing in their patient interactions.

Hearing loss is a proven barrier to good health and quality of life. Reed et al (2019) recently showed untreated hearing loss increased the cost of care in older adults, compared to adults without hearing loss. The study suggests that hearing loss is associated with increased healthcare care expenditures and resource utilization. Notably, hearing loss was associated with an average 46.5% increase in health costs and a 44% increase in risk of 3-day hospital readmission over a 10-year period. Awareness of the burden that hearing loss places on individuals, insurers, and hospitals contributes to the growing evidence of hearing loss as a public health concern.

When primary care physicians and referring health care professionals can help serve their patients with holistic and preventative care, they are, in turn, supporting the patient's total body health. In the study cited above (Reed et al 2019) of the patients that proceeded with hearing aid prescriptions to address their hearing loss, 36% saw mental health improvements, 48% experienced quality of life improvements, 56% reported improvements in relationships at home, and 90-100% had their income loss decreased. ■

References

- Reed, N. S., Altan, A., Deal, J. A., Yeh, C., Kravetz, A. D., Wallhagen, M., & Lin, F. R. (2019). Trends in Health Care Costs and Utilization Associated With Untreated Hearing Loss Over 10 Years. *JAMA Otolaryngology-- Head & Neck Surgery*, 145(1), 27–34.
- Tysoe, R. (2013) Interventional Audiology: Partnering with Physicians to Deliver Integrative and Preventive Hearing Care. *Hearing Review*. 36 (11)23-27.

Kelsey Rutis is SBU Manager at Audigy

Lisa Howell is Marketing Manager at Audigy

Promoting Hearing Care Literacy to
the Medical Community Through the

Virtuous Cycle of Patient Engagement

Brian Taylor, Au.D. and Bob Tysoe



A growing body of evidence shows that individuals with the knowledge, skills, and confidence to become actively engaged in their health care are more likely to experience better health-related outcomes (Domecq, et al 2014). The term patient engagement is used to describe this process. There are several facets of patient engagement, including motivation and self-confidence. Moreover, specific skills such as the individual's reading level and listening ability, which form the core of health literacy, influence patient engagement. While an individual's motivation and self-confidence to engage in health self-management often are not measured as part of health literacy, they are included in measures of patient activation. The bottom line is that individuals who are not engaged in their own healthcare, as well as the decision-making process surrounding it, are much more likely to have poor health literacy. Therefore, it is essential for audiologists to identify help-seeking individuals who are at risk for poor health literacy and offer solutions that are aligned with these lower health literacy levels.

Of course, patient engagement and health literacy are important factors in the clinic when working directly with patients. However, given that most adults with hearing loss fail to seek help from an audiologist, it is imperative for those professionals to find ways to bolster the hearing health literacy and patient engagement of those individuals at risk for hearing loss in the medical arena – places where older adults are likely to be receiving regular care from a primary care physician. The purpose of this article is to provide audiologists with a systematic plan for how they can work directly with the medical community to strengthen patient engagement in those at risk for hearing loss. The main idea being that patients who experience a higher level of engagement with their physician are more likely to engage in services delivered by an audiologist.

Scope of the Challenge

It is well known that age-related hearing loss is both under-treated and inadequately treated. Current estimates suggest that about 20% of adults with hearing loss in the United States wear hearing aids (Lin et al, 2011). Further, while a higher percentage of individuals with severe hearing loss wear hearing aids, less than 10% of them who meet the candidacy criteria for cochlear implants have undergone cochlear implant surgery (Sorkin & Buchman, 2016) – an intervention that is usually more effective than traditional hearing aids for the proper candidate (Boisvert, et al 2020). Thus, it is fair to conclude that many adults with severe hearing loss are inadequately treated, while those with milder hearing loss are under-treated.

Only 20%
of adults with hearing loss in the
United States wear hearing aids.

What is patient engagement?

The essence of patient engagement is providers and patients working together to improve health. A patient's engagement in health care contributes to improved outcomes, Information technologies such as social media, user-friendly websites and educational materials available on-demand can support engagement. Patients want to be engaged in their healthcare decision-making process, and those who are engaged as decision-makers in their care tend to be healthier and have better outcomes.

It is widely believed there are several factors associated with under-treatment and inadequate treatment of adult onset hearing loss. One, access to providers who specialize in treatment of hearing loss, especially surgeons who perform cochlear implant surgery, is a problem in many rural parts of the country. Long travel times and even long wait times to see the surgeon are significant

barriers. Two, there are misconceptions about device candidacy and the risks associated with them. Many persons with severe hearing loss (and even some audiologists) believe that cochlear implants are reserved for the most profound hearing loss. Three, there is poor awareness among the general population about the consequences of untreated hearing loss, which can be harmful. In general, the public still largely thinks hearing loss is a completely benign consequence of the aging process.

A recent study underscores the three points listed above: the general population has a poor understanding of what constitutes normal hearing as well as the assortment of viable treatment options available to them, including over-the-counter (OTC) hearing aids, prescription hearing aids and cochlear implants. Carlson et al (2022) surveyed 1250 adults between the ages of 50 and 80 years old. Only 9% of the respondents were able to correctly identify what constitutes a “normal” range for hearing. The authors compared the respondent’s knowledge of hearing loss to other common chronic conditions and found that 93% were able to identify the “normal” range for vision, 85% for blood pressure and 52% for high cholesterol.

Further, when respondents were asked to rank order the importance of addressing hearing loss within the context of ten other conditions, hearing loss was ranked near the bottom of the list. Perhaps the most eye-opening finding in their survey was that respondents were twice as likely to routinely bring their pet to a veterinarian than have their hearing evaluated.

All told, this survey indicates that most middle aged and older adults, segments of the population most likely to have hearing loss, are unaware of its consequences, the comorbidities associated with it, how and where to have their hearing assessed, and the wide range of current treatment options that could both improve communication and quality of life. Clearly, the results of this survey serve as a call to action: hearing care professionals of all stripes must improve the hearing health literacy of the general adult population.

Most middle aged and older adults, segments of the population most likely to have hearing loss, are unaware of its consequences.

Hearing Health Literacy in the Medical Community

Perhaps more disconcerting, the problem of poor hearing health literacy is not confined only to the general public, as demonstrated in another recent survey, conducted by the same authors. Sydlowski et al (2022) surveyed 205 primary care physicians and 201 nurse practitioners or physician assistants. Their results yielded these four conclusions.

1. Less than half of survey respondents (36%) reported they recommended annual hearing tests for patients, while assessment of blood pressure cholesterol, body mass index and blood glucose levels were recommended at least annually by more than 80% of the respondents.
2. While upwards of 90% of survey respondents know the “normal” metrics for blood pressure, cholesterol, body mass index, blood glucose and vision, but only 57% of the respondents could define the standard definition of normal hearing. And an even lower number (24%) had familiarity with the concept of “20/20 hearing.” (The [Hearing 20/20 campaign](#) is a new public health initiative to adopt 20/20 as a common metric for normal hearing. It was launched in the fall of 2020.)
3. Although most of the survey respondents stated that hearing is important to overall health, leads to social isolation, and negatively affects quality of life, a paltry 40% of the respondents believed that hearing loss is treatable. Smaller numbers (20%) believed hearing loss is a normal part of aging, and fewer still (17%) realize that hearing loss is preventable.
4. Relative to other important medical conditions to manage, hearing loss came in dead last. Specifically, survey respondents were given a list of ten other important conditions, including heart disease, COPD, arthritis, cancer, asthma, obesity and others, hearing loss was tied for last by the respondents. Although many of the conditions on this list are considered life threatening when not properly diagnosed and treated, a mere 46% of respondents reported that they discussed hearing test results with patients. Given that hearing loss ranked last on the list, and that it was discussed with patients by less than half of the respondents, suggests hearing loss and its consequences are not a high priority for most providers.



Hearing care professionals of all stripes must improve the hearing health literacy of the general adult population.

The gap between the impact of hearing loss on daily living and whether medical professionals believe it can be treated and prevented is illustrated in Table 1. The survey results appear to suggest that most medical professionals are well versed in the consequences of age-related hearing loss but many lack knowledge and insight on prevention and treatment strategies. Notice in Table 1 that two-thirds or more of respondents stated that hearing loss impacts quality of life (84%), leads to social isolation (78%), impacts safety (76%) and is important to overall health (67%). In contrast, 40% or fewer reported that hearing loss is treatable, a normal part of aging and preventable. This gap is an opportunity for audiologists to raise awareness and educate the medical community about prevention and treatment strategies for age-related hearing loss.

Table 1. A summary of key survey responses from medical professionals.

Survey Questions	Responses (n=406)
Hearing loss impacts the quality of one's life	84%
Hearing loss can lead to social isolation	78%
Hearing loss can impact one's safety	76%
Hearing is important to my overall health	67%
Hearing loss is treatable	40%
Hearing loss is a normal part of aging	20%
Hearing loss is preventable	17%



Only 40%
of survey respondents believe
hearing loss is treatable.

Only 17%
of survey respondents believe
hearing loss is preventable.

Let's more carefully examine the three survey questions in which the minority of respondents cited low aptitude and offer a course of action that reverses this trend.

- 17% believe hearing loss is preventable
- 20% believe hearing loss is a normal part of aging
- 40% believe hearing loss is treatable

For each of these topics, how can audiologists turn the tide and improve hearing health literacy among medical professionals? It starts with the ability to execute these four tactics.

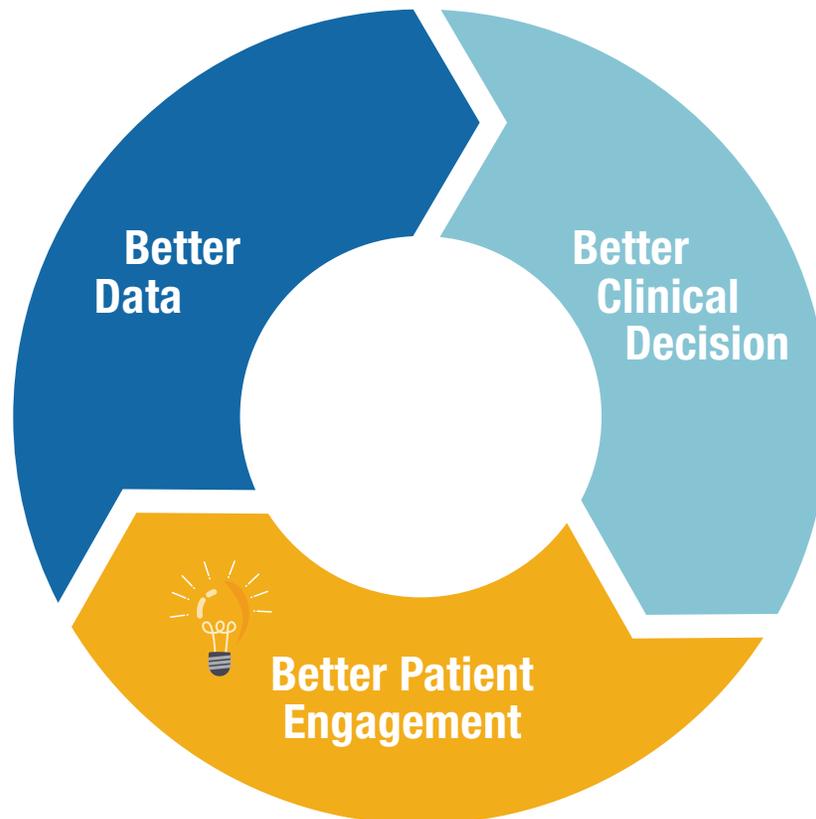
1. Create an engaging format to deliver educational materials

We live in a world where people digest information in short bits. Whether that information is delivered in print, via video or through social media, the content must be brief and visually attractive. Audiologists are encouraged to share their knowledge published research that demonstrates hearing loss is preventable, a normal part of aging and treatable.

2. Feed the Virtuous Cycle of Patient Engagement with Timely and Relevant Content

Physicians and other medical professionals are trained to use research as part of their clinical decision-making process. Known as evidence-based practice, this process can be viewed as a virtuous cycle, like the one shown in Figure 1. The process starts with data, gathered from well-designed clinical studies. This data yields better clinical decisions which yields better patient engagement, which in turn, leads to the creation of better data. The audiologist's ability to provide evidence-based content in a manner that is succinct, and to-the-point is a proven approach to feeding the virtuous cycle with better data.

Figure 1. The Virtuous Cycle of Patient Engagement



3. Communicate consistently

Once you've decided upon an engaging format and created content that feeds the virtuous cycle of patient engagement, the next step is to deliver the content consistently. This means establishing a rhythm in which content is delivered the same time each week or each month. For example, identify physician practices in your community or geographic footprint and correspond with them using a monthly electronic newsletter that educates on the prevention, identification, and treatment of hearing loss.

4. Provide solutions that reduce communications barriers during in-person appointments

Given the prevalence of hearing loss among the aging population, there are several points of interaction older adults have with medical practices that can benefit from the insights of audiologists. Persons with hearing loss can experience many barriers when using a physician's services, including when booking appointments over the phone, in-person

interactions with the receptionist upon check-in, and while conversing with medical staff during appointments. Audiologists can provide an array of services that help the entire medical staff communicate more effectively with persons with hearing loss. These services include providing tips for talking on the phone, improving the room acoustics for better listening, and the provision of high quality non-custom amplifiers that can be used on an as needed basis.

A Two-Pronged Strategy

The results of the two surveys mentioned in this article suggest that both the general public and the medical community demonstrate significant gaps in their knowledge of hearing loss and its prevention, identification, and treatment. It's up to audiologists to close these gaps by reducing apathy and raising awareness of the consequences of untreated hearing loss – on daily communication and interaction with medical

staff during all-important wellness visits and overall quality of life. We propose a two-pronged strategy using the four tactics outlined above. This starts by educating the general public in your community at every available opportunity. Providing the general public better data about hearing loss and its consequences and possible treatments is likely to yield among this group, better, more proactive decisions about their hearing care, which in turn, yields better patient engagement and feeds the virtuous cycle with better data about outcomes that can be shared with the public.

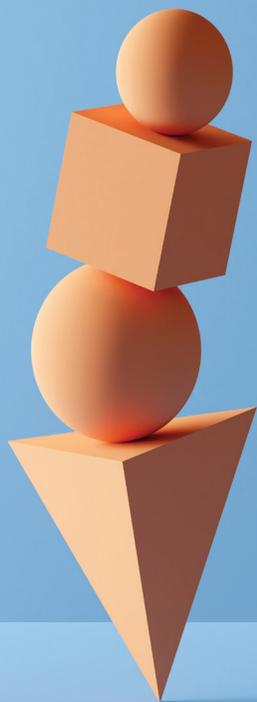
For the medical community, following these four tactics will translate into better patient engagement that can close the gap on hearing health literacy. After all, more engaged medical professionals are likely to produce more engaged patients. This translates into more persons with hearing loss taking an active role in their care, improving the quality of life of people as they age. ■

References

- Boisvert, I., Reis, M., Au, A., Cowan, R., & Dowell, R. C. (2020). Cochlear implantation outcomes in adults: A scoping review. *PloS one*, 15(5), e0232421.
- Carlson, M. L., Nassiri, A. M., Marinelli, J. P., Lohse, C. M., Sydlowski, S. A., & Hearing Health Collaborative (2022). Awareness, Perceptions, and Literacy Surrounding Hearing Loss and Hearing Rehabilitation Among the Adult Population in the United States. *Otology & neurotology: official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 43(3), e323–e330.
- Domecq, J. P., Prutsky, G., Elraiyah, T., Wang, Z., Nabhan, M., Shippee, N., Brito, J. P., Boehmer, K., Hasan, R., Firwana, B., Erwin, P., Eton, D., Sloan, J., Montori, V., Asi, N., Dabrh, A. M., & Murad, M. H. (2014). Patient engagement in research: a systematic review. *BMC health services research*, 14, 89
- Lin, F. R., Thorpe, R., Gordon-Salant, S., & Ferrucci, L. (2011). Hearing loss prevalence and risk factors among older adults in the United States. *The journals of gerontology. Series A, Biological sciences and medical sciences*, 66(5), 582–590.
- Sorkin, D. L., & Buchman, C. A. (2016). Cochlear Implant Access in Six Developed Countries. *Otology & neurotology: official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 37(2), e161–e164.

Brian Taylor, AuD is the senior director of audiology for Signia and the editor of *Audiology Practices*. He can be contacted at brian.taylor.aud@gmail.com

Bob Tysoe is the owner of *Hearing Healthcare Marketing and Business Development*. Bob can be contacted at Robert.tysoe@practicemarketing.com



FALLING FORWARD INTO SUCCESS:



INSIGHTS ON OPERATING A BALANCE CENTER

**Interview with Dr. Danielle Dorner,
Audiologist, Overland Park, Kansas**



AP: Tell us about your career path and what got you interested in balance.

DD: My grandfather was in a tree-trimming accident the summer before I entered high school. He suffered a traumatic brain injury and was hospitalized. He was given a 1% chance of surviving, but, against all odds, he made a full recovery. One of his only residual symptoms was transient vertigo with position changes. He ended up seeing an audiologist who diagnosed and treated him for BPPV. The clinic was gracious and allowed me to shadow for a week, as a high schooler. I saw everything from cochlear implants to comprehensive vestibular evaluations. This solidified my decision to be an audiologist. I guess I was a very persistent/determined (some would argue stubborn) 14-year-old. I feel fortunate that I knew I wanted to be an audiologist at such a young age and had resources available to facilitate my career path.

Fast-forward to graduate school, I was torn between two passions: pediatrics and vestibular. I ultimately settled on vestibular because of the intricate testing and evaluation process. I loved how it can be so black and white, but grey at the same time. The research behind diagnostic testing, treatment options, and clinical indications are always evolving. I had wonderful mentors who encouraged me to pursue private



practice, which is how I found Associated Audiologists Inc. in the Kansas City metro area. I was drawn to the practice by their research/best-practice based approach, comprehensive care, and provider retention. I did my externship here, where my passion for vestibular was fostered and matured.



AP: What are some of the biggest challenges associated with starting a balance center?

DD: Cost and reimbursement. Almost each billable test requires a separate piece of equipment, which can be costly. Equipment manufacturers can change hands thus rendering replacement parts obsolete or unfixable. It seems like every year reimbursement rates are cut. You cannot necessarily counter that with cutting appointment times, because a VNG does not take you any less time, even though it is now “valued” as less.



AP: Please share some insights on start-up costs. Besides investing in the equipment, what are some other costs associated with a balance center?

DD: Marketing and start-up can be very costly. Actual start up costs vary depending upon what equipment you already have including what marketing and online presence already exists. Based on different factors, start up costs for vestibular services could range from \$50,000–\$175,000. Marketing is direct physician outreach in the form of print, in person, or consumer ads. One thing I always say is, your time is often worth more than money (the time spent finding appropriate referrals and counseling them on when/how to refer). I have spent hours traveling to meet different physicians, physical therapist, chiropractors, dentists, retirement communities, etc. It can be extremely tedious and costly. However, once you establish a good working relationship, it is extremely rewarding.



AP: Billing, coding and credentialing seem to be a huge task for many audiologists, what are the unique challenges in that area associated with balance?

DD: Because there are more billable codes compared to traditional audiometric testing, there are more changes and variables to keep track of. For instance, VEMPs (vestibular evoked myogenic potentials) used to be a 92700 (unlisted

CPT) code. In 2020, it was FINALLY recognized as not an “experimental” procedure. Medicare will pay for these tests. However, other government, and private, insurance companies still have not updated their systems, like Tricare. Understanding how and what to bill along with what is or isn’t reimbursed becomes critical when programs are reliant on third party payers/reimbursement. Also, with Medicare, you must consider PQRS/MIPS. We must ensure we are positive reporters by asking all the right questions and documenting everything correctly.



AP: Without sharing too many details, how does reimbursement for balance assessments compare to other procedures conducted in your clinic?

DD: That is a tough question to answer. I would say reimbursement is mediocre. Does it cover our time and expertise? Sort of. We generate some private pay revenue from non-covered treatment services which aids the program. In addition, the strong reputation of our vestibular program builds and maintains important physician and community referral networks that benefit the entire practice. When appropriate, I am also able to discuss the important benefits of better hearing and refer patients to our team members who can provide hearing aids. A unique recent challenge has been patients who have high deductible plans and don’t fully understand how their insurance plan works. Since vestibular services are time intensive and complex, the total cost for an appointment is higher than a typical hearing evaluation/consult. This sometimes leaves a patient with a high deductible health insurance plan with a \$350 or higher bill. We do our best to pre-educate patients and provide every patient with an invoice following our procedures, but it still seems to be patients misunderstanding of how their specific insurance plan works.



AP: Let’s talk about referral sources and patient flow. From where do most of your balance patients get referred? How much time do you allot for balance assessments? How much time during a typical week is spent conducting balance assessments?

DD: Our referral sources vary from primary care, to neurologists, to existing hearing/vestibular patients. Interestingly, we are getting more and more cardiology referrals, which makes sense. A lot of “ruling out” for dizziness includes the



"I had wonderful mentors who encouraged me to pursue private practice, which is how I found Associated Audiologists Inc. in the Kansas City metro area."

– DR. DANIELLE DORNER

cardiovascular system. Our new patients are scheduled for 2 hours. During this appointment we conduct every test medically necessary to rule out/in a vestibular issue. I make the comment to my patients, "at the end of this appointment I want to say that we have exhausted your ear." Sometimes we must rely on imaging for definitive diagnoses, but my goal is always to have the patient leave knowing, it is or is not their ear causing the issue. I typically see 3-4 new patients a day. For average sake, we can say I would spend 30 hours a week doing comprehensive new patient evaluations. The rest of my time is doing follow-up care or medical management audiometric testing (e.g., sudden hearing loss).



AP: How do you market your balance center?

DD: We have multiple "touch points" for existing patients, potential new patients, and referral sources. Our marketing plan focuses on print and digital/online approaches which include topic-specific blogs, keyword and SEO through our website, patient newsletters (both print and email), and physician/provider newsletters with one topic per year related to vestibular. New physician referrals always get a vestibular and practice-wide marketing packet. Patient reports are always mailed to their referring or primary care physician which we also consider part of our physician marketing effort. In addition, we request online or Google reviews following every visit. Over time, because of our large number of positive referrals, it has become its own referral source. In the past, especially at start-up, I did a lot of presentations for local retirement communities and community events.



AP: Besides balance assessments, do you conduct any types of treatment or rehab?

DD: Yes! Unless there is an issue of driving distance, insurance coverage, or body mechanics, I will treat all diagnosed BPPV. In some cases, I have a younger working patient who has a nearly-compensated vestibulopathy and I will

recommend a course of at-home vestibular rehabilitation therapy (VRT). Otherwise, for formal VRT, I refer directly to physical therapy. If reimbursement and billing were not an issue, I would love to keep them all in-house. However, as audiologists, we do not always have a good way to bill for our time, especially in more complex cases. Yes, some private insurance companies will pay E&M codes, but the reimbursement rate can still be challenging. I also have a good working relationship with multiple physical therapy groups. We have built a strong referral network over time which benefits are patients.



AP: Do you employ technicians to assist in balance assessments? If so, what is their role?

DD: No. Of course, each state has different licensure requirements for assistants/technicians which poses limitations where I practice. In addition, the cost of equipment, our existing patient load, and space limitations are not advantageous for our practice to employ technicians at this time. However, we do have an audiology assistant who will occasionally assist me in treatment. I also enjoy training the next generation and find it rewarding to work with our fourth year externs.



AP: Any words of advice for audiologist who aspire to opening a balance center?

DD: If you do not want to start your own, find a practice – whether it is private practice, ENT, or hospital setting – that will facilitate your education and knowledge-base for vestibular testing. If you see a need, fill it! There are still plenty of large metropolitan areas that are lacking in vestibular audiologists. It will help set a practice apart. It is so important to love what you do. Like other areas of audiology, vestibular specialty work is extremely rewarding. ■

READER REACTIONS

TO THE ARTICLE "A NEW ANALYSIS OF THE AUDIOLOGY WORKFORCE"

Article and Data Published in *Audiology Practices* December 2022 Issue



Victor Bray, Ph.D.

Shannon Kim, B.S.

Timothy C. Steele, Ph.D.

Amy M. Amlani, Ph.D.

Kara Kratzer, Au.D.

Alexandra Tarvin, Au.D.

Bryan Greenaway, Au.D.

In *A New Analysis of the Audiology Workforce*, Bray & Amlani documented the low growth rate of the audiology profession, compared to other healthcare professions.¹ The authors also cautioned readers on the potentially serious professional issues if audiology cannot and does not meet the increasing demand for services to meet the needs of the aging US population. The article stimulated significant interest among *Audiology Practices* readers, prompting the authors to conduct a follow-up interview to document the reactions and opinions from members of the ADA community in response to the data presented in the article.

Dr. Bray and Dr. Amlani: Thank you for agreeing to provide your feedback and opinions on the information presented in *A New Analysis of the Audiology Workforce*. Figure 1 of the article consists of a workforce analysis of 19 healthcare occupations, which was originally presented in a poster at the 2021 American Academy of Audiology conference.² What is your initial reaction to the finding of a 5% workforce growth for Audiology over a 20/21-year span (1999 compared to 2019)? Are you personally concerned about the number of audiologists in the country (too many, just right, too few)?

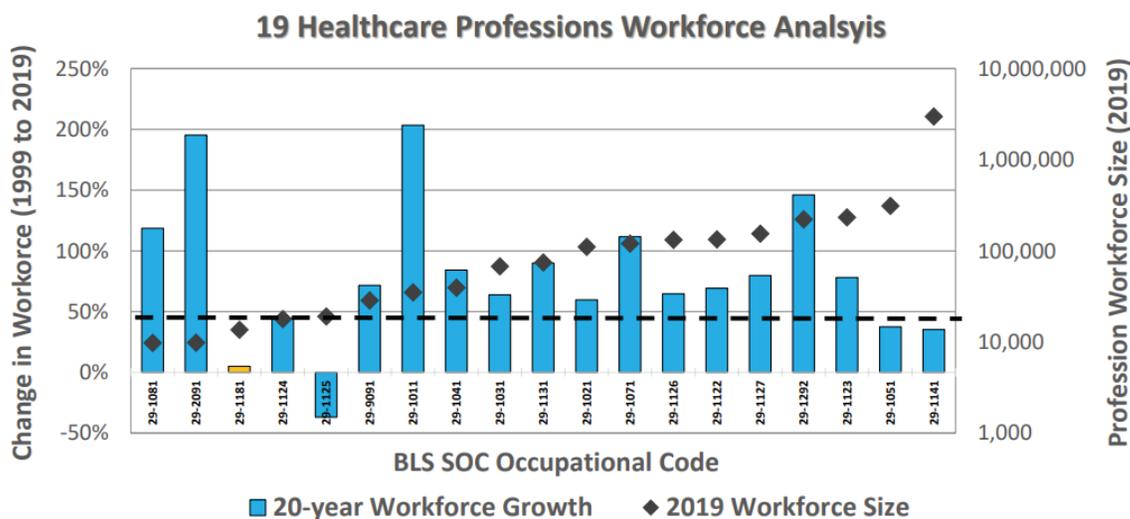


Figure 1. Workforce analysis for nineteen healthcare occupations comparing workforce growth between 1999 and 2019 as reported by Bray & Amlani (2021).

Dr. Steele: Dr. Bray and Dr. Amlani, thank you for asking me to further explore your outstanding and eye-opening article. This type of information is critical to the current and future success of the profession. The very low 5% workforce growth for Audiology over a 20/21-year period, combined with the large growth in the U.S. aging population and with the retirement of baby boomer audiologists, is alarming. I assume we've had some challenges with low workforce growth, but I hadn't expected it to be this low during that time frame. Personally, I'm concerned about the number of Audiologists in the country. We've traditionally been very blessed to have several academic institutions near our practice in Kansas and Missouri which have served as a natural pipeline for recruitment but of late it's become more difficult, and it seems there are more openings than available Audiologists.

Ms. Kim: I am concerned since I believe that our profession is much needed in healthcare. Not only do we treat hearing loss but can provide expertise on implantable devices, tinnitus, BPPV, etc. Tinnitus and BPPV can be incredibly debilitating, and we are able to provide much needed advocacy for these patients.

Dr. Tarvin: My initial reaction to Figure 1's data is not a surprise. I remember hearing at a national conference years ago the number of audiologists graduating and those retiring were too close for comfort. Giving the small cohort sizes within Au.D. programs, the lack of audiology awareness, and the technology and various sources of industry disruption, I was surprised to see there was any growth at all.

Dr. Greenaway: The growth rate of audiology over the last two decades is concerning. We know we aren't growing at a rate that is sustainable to serve the hearing needs of the increasing older population in our country. That doesn't even consider the other populations we can serve through hearing conservation, balance testing, APD testing and treatment, and tinnitus management. Since the introduction of the Au.D. we have labeled ourselves the doctoring professionals who own these areas. However, with our profession's current growth rate, we're going to see other professions – some less qualified than we are – slowly eat away at the domains we worked so hard to own.

It's also important to look within that statistic to see that we are disproportionately underserving some communities over others, too. The 5% growth number shows a clear issue with access to care, but when patients have to travel hours or take a day off work to get to see an audiologist, we are also exacerbating the affordability issue for our patients.

Dr. Kratzer: This statistic is somewhat concerning to me. As the population of individuals needing hearing healthcare grows and the number of audiology providers decreases, it will be increasingly more difficult for audiologists to keep up. This may lead to an increase in underserved areas, lower quality patient care, as well as workplace burnout.

Comment from Dr. Bray and Dr. Amlani: We share the concern that many have regarding the lack of long-term growth of the audiology profession. We have been alarmed since we first reported in 2019 that the 1999-2018 change in professional workforce was only 350 persons over a 20-year period at a time when the BLS projected audiologist demand for ten years (2018-2028) was 220 audiologists per year.³

 **Dr Bray and Dr. Amlani:** Figures 2 & 3 show the updated workforce analysis, by degree, 2012-2021 with 10 Associate's degree professions, 5 Bachelor's degree professions, 8 Master's degree professions, and 8 Doctoral degree professions (31 total). Across the four college degree categories, there are different group growth rates: 14% for Associate's (3 of 10 growing > 20%), 17% for Bachelor's (2 of 5 growing > 20%), 45% for Master's (8 of 8 growing > 20%), and 20% (4 of 8 growing > 20%) for Doctoral. The Master's degree group is the most successful in filling and growing their occupational niche in healthcare.

What is your reaction to this observation, in light of Audiology moving from a Master's to Doctoral degree profession? Audiology has traditionally been grouped in 'allied healthcare' with OT, PT, and SLP. What is your reaction to Audiology's 10-year lower growth rate (15%) compared to the other professions?

"We know we aren't growing at a rate that is sustainable to serve the hearing needs of the increasing older population in our country."

— Bryan Greenaway, Au.D.

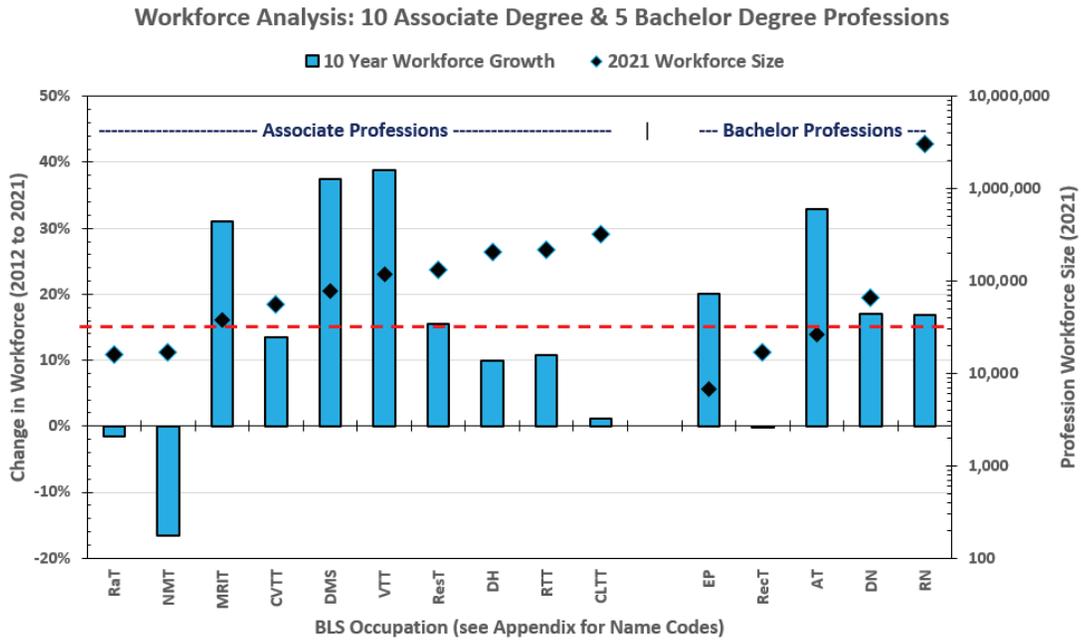


Figure 2. Updated workforce analysis across healthcare occupations as reported by degree designation (Associates, Bachelors) between 2012 and 2021.

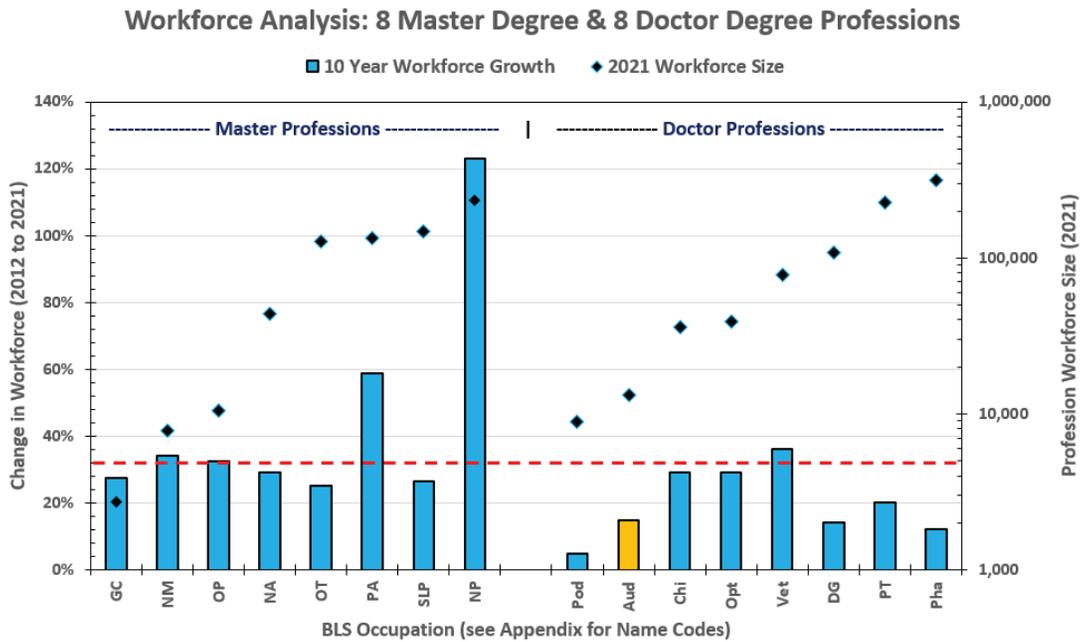


Figure 3. Updated workforce analysis across healthcare occupations as reported by degree designation (Master, Doctoral) between 2012 and 2021.

Dr. Steele: I am an advocate for Audiology being a doctoral-level profession, but I can't help but wonder if the move to a doctoral profession, without the corresponding guaranteed increase in annual compensation, especially early on, may have lowered the growth rate of Audiology. In addition, the added expense for students deciding on careers that require additional education, higher educational costs/student loan debt, and additional years out of the work force may be a barrier for some young people who then decide against a doctoral-level professional like Audiology. If I were a young person evaluating how much schooling is required for an allied health profession while considering average annual compensation and weighing different amounts of student loan debt, I can understand where the doctoral-level entry point for Audiology may be a hurdle too high for some individuals.

Dr. Tarvin: I do not only attribute the difference in growth rate from audiology to the other allied healthcare professions due to the change from Master's to Doctoral degree. PT also transitioned to a doctoral degree as the terminal clinical degree. In my opinion, the main difference is the lack of understanding of and appropriate referrals to audiology within the medical landscape. OT, PT, and SLP have a broad scope with diverse populations and widely accepted within healthcare. If you were to ask many other healthcare professions what an audiologist does, they would likely stop at hearing and think more about the geriatric population. Audiology has a broad scope that is often unknown or misunderstood for considerations in a patient's overall treatment plan- from hearing loss, auditory processing, vestibular diagnostics, aural rehabilitation, tinnitus education and management, prevention, and more. Since the other allied healthcare professions have a growing referral need and a generally clearer understanding of their place in the medical landscape (with many job opportunities), it makes sense that an individual would consider those professions worth their effort and a good financial and educational investment.

Dr. Greenaway: For the record, I feel the transition to the Au.D. was a worthwhile endeavor. It was a stepping-stone to greater autonomy and recognition of audiologists as autonomous treating providers. That said, the value of time and earnings potential cannot be overstated for prospective students. When an undergrad is looking at career possibilities and comparing doctoral and master's options, one can see why a career that requires one-to-two fewer years in school, less student debt, and still offers meaningful work and good earnings outcomes would be more appealing.

Regardless of anyone's feelings about the transition, the Au.D. is here to stay, and it is our profession's responsibility to ensure we are doing what we must to attract exceptional students. The cost side of the equation is difficult (we're not in a position to demand lower tuition costs), but we can increase the value end of the equation. This includes more outreach about the profession and its impacts on health and wellness at the high school, community college, and undergraduate levels. It also means continued investment in advocacy efforts for reimbursement of full scope of practice and appropriate compensation for the services we provide. Legislation like the Medicare Audiologist Access and Services Act is vital in adding to the value of the Au.D.

Dr. Kratzer: The information presented in this paper does provide a compelling argument that Master's level professions appear to have a more steady rate of occupational growth. It appears that moving to a Doctorate level has had an impact on the number of individuals going into the field. I currently serve as an adjunct professor for an undergraduate Communications Disorders program. I routinely have students tell me that they enjoy my class and would be interested in pursuing a career as an audiologist, but the extra years of school are too much. Because of this, they decide to go into speech pathology instead. The question we should consider now is, do the benefits of the doctorate and increased knowledge and skill doctorate level professionals possess, outweigh the negative aspect of restricting growth of the occupation? Another question that should be considered is, how has the return on investment for individuals entering the field grown in response to moving to a doctorate level? In most markets, audiologists have seen an increase in cost and time to obtain a doctorate but not necessarily seen an appropriate increase in salary. For some, the added years and cost of education may not be worth it in the long run.

Comment from Dr. Bray and Dr. Amlani: We also believe that the doctoral-degree transition has been done, perhaps with unintended consequences, and cannot be undone. The observation that PT has also undergone this transition (and the OT profession is undergoing this transition) while maintaining steady workforce growth does beg the question of what are the lack-of-growth issues in audiology? The issue of educational debt may be an important consideration, as our prior work has shown that debt, and debt-to-income ratio is significantly higher for audiology graduates than PT and OT graduates.⁴

"I can understand where the doctoral-level entry point for Audiology may be a hurdle too high for some individuals."

— Timothy C. Steele, Ph.D.



Dr. Bray and Dr. Amlani: As you consider the information presented in Figure 4: Change in Audiology Workforce (1999-2019), what factor or factors do you attribute the decrease in Audiology BLS workforce from 12,950 in 1999 to 9,810 in 2004?

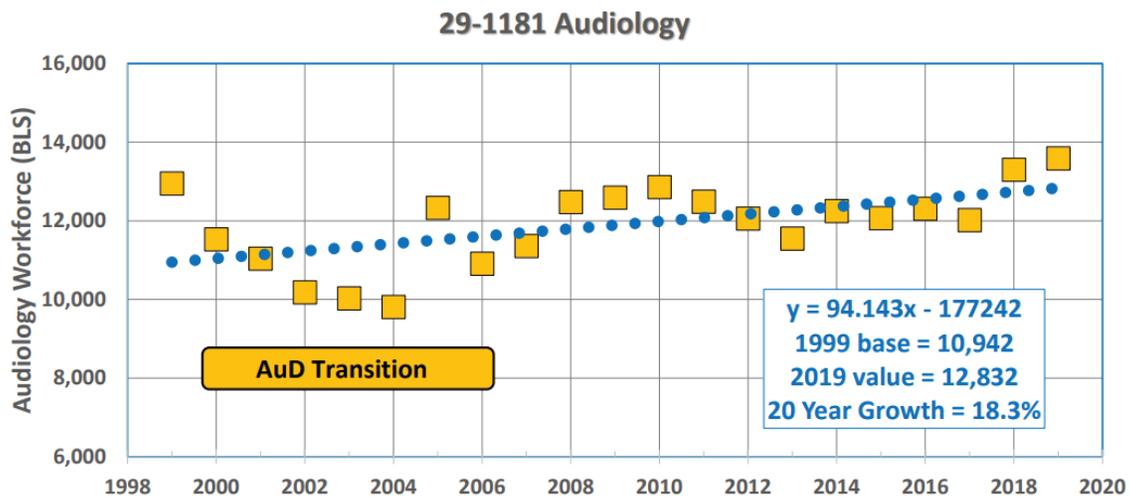


Figure 4. Change in Audiology occupational workforce between 1999 and 2019 as reported by Bray & Amlani.

Dr. Steele: This time frame was during my early career, and I was actually completing a Ph.D. part-time while working as an Audiologist with a Master’s degree. That time of transition in the profession created some uncertainty and this, in turn, may have caused some practicing Audiologists to leave the field. If Audiologists felt they needed a doctorate to remain competitive and/or employable, they may have explored other employment options. Knowing the doctorate would be the eventual required entry degree, I explored applying to Medical School and ultimately decided to proceed with a Ph.D. in Audiology feeling it offered me more flexibility especially since I didn’t have a plethora of Au.D. programs available at that time and wasn’t able to relocate with a young family.

Ms. Kim: I believe there are a variety of factors such as the increase in tuition and the struggle to receive more recognition for our profession. A common complaint I hear is about the price of an audiology education and the return on investment. Students feel that they are paying more to make less money. According to the Bureau of Labor Statistics, the median annual pay for an audiologist was \$78,950 in 2021. We are a doctoral level degree that specializes in auditory and balance disorders, so a six-figure salary is fair. As for professional recognition, I believe that audiologists deserve more value- hearing health and balance disorder care is much needed in healthcare.

Dr. Tarvin: Regarding Master’s vs. doctoral degree transition, a doctoral degree takes more time, money, and effort to achieve. It is naturally going to have fewer candidates willing or able to engage in this tier of education. In addition, if there were fewer Doctor of Audiology programs available than there were Master’s program, which would have also accounted for the inability for some to acquire their Au.D., even if that was their intention at the time.

Dr. Greenaway: I don’t have the benefit of experience for this time period (the curse of my youth), but a combination of factors likely led to this decline in workforce numbers. While there were larger workforce factors such as a recession in the early 2000s, the high rate of workforce loss during that period seems to be unique to audiology. The transition to the Au.D., no doubt, had an impact on the number of incoming professionals. However, that transition may have only exacerbated other existing issues in the profession. Windmill and Freeman reported in a 2013 paper that the attrition rate of audiologists in the first 10-12 years after graduation was 41% in the years preceding the transition to the entry-level doctorate.⁵ That may be the more important statistic to look at when having the conversation about what happened in this time period. It may also be important to analyze as we look to the future.

It would also be interesting to see more detailed data on who was leaving the profession during this time. This was also a time of significant technological change, in terms of the hearing aids being fit, the equipment audiologists were using, and the way

technology was finding its way into every facet of work and life. It's possible that also played a role in professionals' desire to leave a field that was changing rapidly (another possible analogy to our present situation). Again, I don't discount that the transition to the entry-level degree played a role in this period, but I think you could write a book on the intricacies of this era in audiology.

Dr. Kratzer: More than likely, there are multiple factors that have contributed to this shift. The move to the doctorate, along with an increase in Hearing Instrument Specialists, as well as an increase in those retiring from the profession have likely contributed to this. Another contributing factor may be the small number of Au.D. programs available to students as well as restricting the number of students accepted to these programs. For example, there are currently no Au.D. programs in the state of Georgia. In the past, the Academic Common Market program allowed students in Georgia seeking an Au.D. degree to obtain in-state tuition in certain nearby states. This program has recently ended. Given that Audiologist salaries have not increased much in many areas with the implementation of the doctorate and that students in places like Georgia would not only have to pay tuition for a doctorate level degree, but also have no option but to pay out-of-state tuition costs, some students may be deterred from entering the profession.

Comment from Dr. Bray and Dr. Amlani: There is no doubt that the Au.D. transition time was chaotic and complicated the student enrollment process with the closure of about one-half of the audiology programs. This was compounded by Master's degree audiologists who chose to leave the profession rather than stay in the new doctoral-degree environment.

With regard to the important Windmill and Freeman analysis, they concluded a decade ago that "to meet demand, the number of persons entering the field will have to increase by 50% beginning immediately. In addition, the attrition rate will have to be lowered to 20%." At the time of their analysis (2011 data) the number of graduates entering the workforce was about 600 per year and was offset by a 40% attrition rate. With these considerations, and no changes in workforce growth and attrition patterns, they projected that the number of audiologists would decline over the next 30-year period.

Dr. Bray and Dr. Amlani: Figure 5 illustrates the updated Change in Audiology Workforce using three analyses, with the largest rate of growth reported at 200 persons per year from 2012-2021 (1.5% of the BLS workforce size of 13,000). Not reported in the article but known from the CSD Education Survey, is that Au.D. programs are graduating about 760 persons per year (5.8% of the workforce).⁶ The profession is theoretically losing about 560 persons per year (4.3% of the workforce). What is your reaction to this, and if you have concern, is it on the number of persons entering the profession, the number of persons exiting the profession, or both?

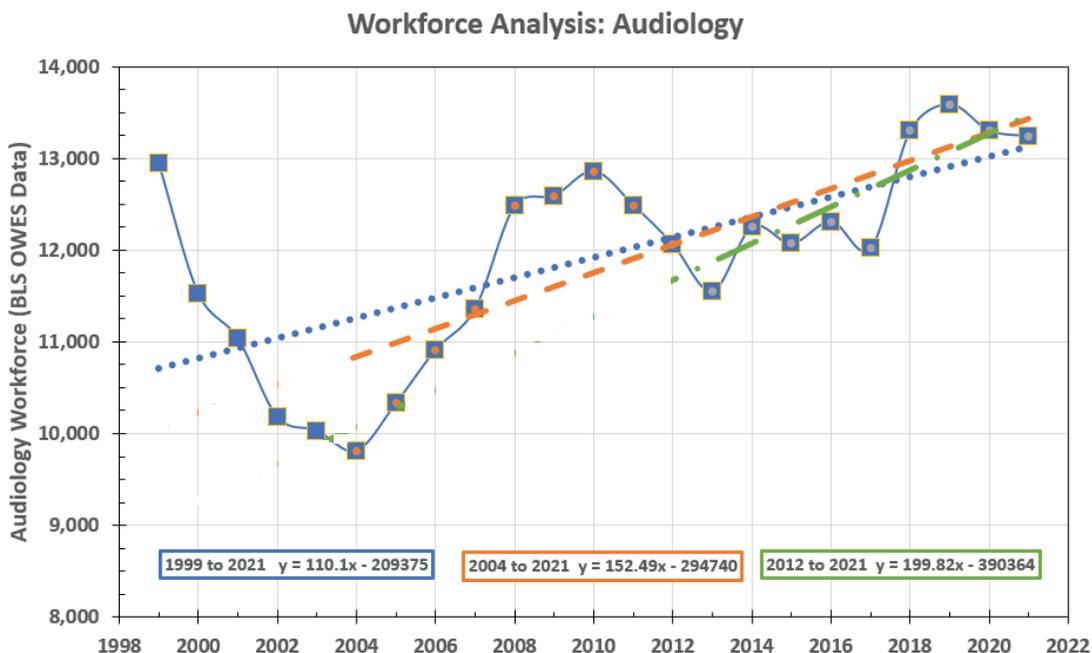


Figure 5. Updated change in Audiology occupational workforce between 1999 and 2019.

Dr. Steele: Personally, I feel we need to be experiencing more growth in Audiology and if we are gaining (net) 200 Audiologists per year that seems low relative to the needs of the population and the profession. Within our practice, we've seen higher turnover with recently graduated Au.D.s. Of our most recent hired Audiologists over an 8-year period, 40% have left the profession completely to raise their young families full-time while 20% have taken positions outside of private practice. It would be interesting to further explore the 560 persons leaving the workforce each year. I wonder if these attritions are mostly due to retirements or are there other forces at play that we should better understand such as job satisfaction, compensation, work/life balance.

Dr. Tarvin: I had previously heard this statistic early in my career which was not very encouraging. Unfortunately, the data is still discouraging. We have a recruitment problem of encouraging students in high school and early bachelor's to learn about and consider audiology as a profession. I learned about audiology through sheer luck while exploring undergraduate options in college and came over from neuroscience. While in my undergraduate program, audiology was presented more from the research perspective and speech-language pathology was given much more weight in the coursework mix. When I was in my Au.D. program, several of the professors were recruiting me for a research focus encouraging the Ph.D. route and discounting the clinical application. While clinical and animal research is very valuable, what will be the point if we do not have enough clinical providers to apply the findings to people and their quality of life? Once an audiologist, I hear colleagues leaving or considering leaving the profession for outside options due to some of the logistical challenges of practice. We also have a portion of the 4.3% leaving from natural retirement.

Dr. Greenaway: These numbers are concerning if we want the profession to continue to meet the needs of the US population in hearing, balance, and tinnitus. Necessary workforce growth can result from three options, increasing the number of qualified audiologists who graduate each year, decreasing the attrition rate of practicing audiologists, or a combination of both.

"We have a recruitment problem of encouraging students in high school and early bachelor's to learn about and consider audiology as a profession."

— Alexandra Tarvin, Au.D.

Adding more audiologists to the workforce would be great, but we're seeing a reduction in graduate school applications across healthcare professions and across the country. A cursory look at ASHA's EdFind website shows that many programs are not meeting their target class sizes. While the profession of audiology has little sway over academic programs, our national and state organizations can do more to promote audiology with potential students.

The loss of 560 audiologists a year is also concerning. Without more detailed data on the age of audiologists and why they are leaving the profession, it's hard to know how modifiable this number is (I suppose we have to let people retire eventually). However, based on the number of articles and

interviews I've seen over the past year addressing audiologist burnout and stress, my guess is that the profession's pre-retirement attrition rate is still high. In my view, this is where we can have the most impact as a profession. Our national organizations can and need to play an active role in studying and preventing premature attrition.

Dr. Kratzer: I do have concerns that we are not producing enough audiologists to keep up with our country's hearing healthcare needs. I feel the concern is the number of people entering the profession. Audiology will have to not only continue to advocate for our profession but be creative to fill these gaps and more open to working with other professionals such as hearing instrument specialists (HIS) and audiology assistants to address this need.

Comment from Dr. Bray and Dr. Amlani: Growth in the professional workforce is a dynamic interplay between incoming graduates and exiting retirements and attrition from abandonment of the profession. In a preliminary analysis of graduation rates, as a percentage of the workforce size, we reported an educational pipeline (graduates / workforce) of 4.7% for optometry, 5.0% for physical therapy, 5.8% for audiology, 6.4% for podiatry, and 6.8% for speech language pathology.⁷



Dr. Bray and Dr. Amlani: Considering Figure 6: Projected Possible Workforce in 2021, are you concerned that Audiology may not be meeting the growing needs of the US population? What is your reaction to the more than doubling of the BLS workforce numbers for HAS/HIS over decade (2012-2021)?

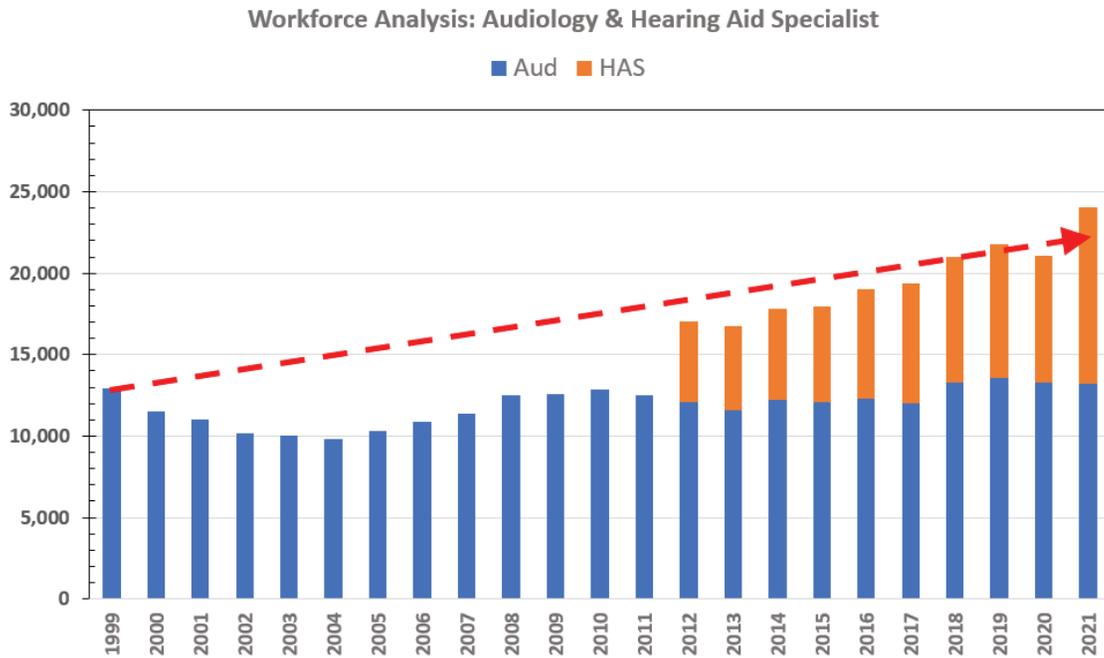


Figure 6. Predicting hearing healthcare workforce that is expected in 2021 (re: 1999, depicted as red dashed line), and workforce estimates of Audiology (i.e., blue bars) and Hearing Aid Specialist (i.e., orange bars)

Dr. Steele: Absolutely—I can’t believe that our audiology practice would be unique, but it seems harder to find and recruit audiologists which can be even more challenging in rural areas. This year is the first year since 2007 that we haven’t had audiology externship applications with two open externship positions available. We are exploring new ways to deliver services and provide care all while making efforts not to sacrifice quality. The use of audiology assistants/support staff is becoming essential for our business.

I’m not surprised that HAS numbers have doubled, and with the rise in retail options for hearing care it makes sense that these positions have necessitated more hearing instrument specialists. In addition, if we haven’t seen the population needs met by a lack luster growth in the Audiology workforce growth, then it’s an opportunity that HAS have been able to capitalize on especially since the educational/licensure requirements for a HAS isn’t as demanding or costly.

Ms. Kim: I am concerned that Audiology may not meet the growing needs of the US population. I’m also surprised to hear that there will be more than doubling of the BLS workforce numbers for HAS over decade (2012-2021). As for the lack of growth in the audiology workforce, I’ve heard some [potential audiologists/students] explain that if they mainly fit hearing aids, they would rather save money and be a hearing aid dispenser. I understand their viewpoint since student debt is difficult. For me, I went to school to become an audiologist, not a hearing aid dispenser. I went through the education and training in order to do our full scope: amplification, implantable devices, vestibular, tinnitus, etc.

Dr. Tarvin: I am concerned that the number of audiologists is not going to meet the population’s need for proper audiologic care in the near future. If we look at the data regarding how many people in the US have untreated hearing loss, we know that if all of those individuals decided to treat their hearing loss, Audiology and HAS workforce would not be able to meet that need. If everyone that had a balance concern was properly referred needing a diagnostic balance assessment, there would be even larger wait times for vestibular specialists. We are already seeing this within our local ENT clinics. Audiology is not meeting the needs

of the US population; however, we are also not seeing the number of patients that we should be given how many individuals need our care that are not being referred for our care.

The more than doubling of the BLS workforce for HAS in the past decade is interesting. I can only answer from my own perspective based on my own observations and it seems that HAS are often recruited. It does not seem to be a profession that someone actively seeks out, but they are recruited by other HAS, audiologists, or businesses to fulfill a clinic's provider needs. This would then lend to the idea that the growth is fulfilling a need within the hearing healthcare profession at large rather than an individual's drive to be an HAS. The job outlook is enticing and the financial tradeoff for HAS is good. They can participate in the highest revenue generating scope of audiology practice (hearing aids) without the need for post-secondary education, no student loans, and short-term training.

Dr. Greenaway: I don't think there is any doubt audiology is not meeting the needs of the US population with its current numbers. As I mentioned before, when we look beyond the needs of Americans with hearing loss, we can see we're falling short when it comes to meeting the needs of our tinnitus, APD, dizziness, and conservation patients, as well.

Given audiology's inability to meet the needs of the population, it's no wonder hearing aid dispensers are growing so rapidly as a profession. They are filling the gaps we are leaving open, and not only in overall numbers, but also in geographic distribution and diversity of providers.

The growth of the profession of hearing aid dispensing could be a benefit to audiology. Hearing aids are requiring less knowledge and skill to fit – just look at what OTCs can do – which means audiologists' expertise isn't as valuable in that aspect of our practice. By incorporating dispensers, audiology assistants, and other paraprofessionals into the way we practice, we still ensure our patients are having their needs met while freeing our time for the aspects of our scope that uniquely require our knowledge and skills.

Dr. Kratzer: I do have concerns that we are not producing enough audiologists to keep up with our country's hearing healthcare needs. The growth in the HAS workforce does not surprise me much. HAS are able to do a portion of the audiologists' job with zero higher education. From a business perspective if you are interested in only working with hearing devices and not more advanced specialties such as vestibular and cochlear implants, then it might make sense to go straight into the workforce instead of spending many years and a significant sum of money on school. I personally know several audiologists that are retiring and leaving their business to their children who have become HAS.

Comment from Dr. Bray and Dr. Amlani: Marquardt, in 2017, wrote that hearing aid dispensers earn on average \$11,000 less per year in real wages than audiologists and that employers may shift employment to hearing aid specialists in situations where the main duty is testing and fitting hearing aids.⁸ According to the May 2021 BLS reports, the difference in mean wages in the two professions is now around \$26,000 (\$86k vs. \$60k).



Dr. Bray and Dr. Amlani: Do you see HAS expansion of scope of practice currently occurring (while audiology scope of practice is not changing), and if so, how does this expansion impact workforce dynamics in hearing healthcare?

Dr. Steele: With a lack of strong growth in the Audiology workforce, it seems natural for a possible HAS expansion of scope to meet the needs and demands of an aging population. I don't mean to be nonchalant about this but it's easy to see how or why this might occur. I often reflect on the challenges faced by individuals in rural communities of Kansas and Missouri where I grew up and provide outreach services. There isn't the luxury of Audiology services in some of these areas and it leaves a void where other hearing care professionals can serve.

Ms. Kim: Professionally and respectfully, I feel that in general, proper training and certification coincides with ethics. As long as someone has proper training and certification for the well-being of a patient and knows when to refer, then it is okay.

Dr. Tarvin: Yes, I see HAS expansion of scope of practice currently happening with intermittent threat throughout the country to continue happening. I do not see the expansion from lack of growth in audiology but rather the internal desire for HAS to be able to do more and bill for more without the need to refer to audiology and "lose the patient" or actually acquire an audiology degree.

Dr. Greenaway: Look at the relationship between optometrists and opticians and you can see the potential for benefit in the growth of dispensers. That being said, I think it's important to draw lines around training and expertise when it comes to the expansion of dispensers' scopes of practice. Certain aspects of care require the higher and more standardized level of training that audiologists receive.

Comment from Dr. Bray and Dr. Amlani: To some degree, there is a continuous expansion in the scope of practice that is being driven by the manufacturers of hearing aids. For example, at one time traditional hearing aids were Class I devices. Class II devices included tinnitus maskers / tinnitus instruments and devices which could be mated with wireless (FM) technology. Class II device functions were generally limited to the scope of practice of audiologists. Today, almost all hearing aids are Class II, with integrated wireless technology via Bluetooth, and often include multi-modal tinnitus features. While tinnitus management may not be within the state-regulated scope of practice for many hearing aid specialists, the universal access to Class II technology enables anyone with a license to fit and dispense hearing aids to now access and utilize the tinnitus management technology provided by industry.



Dr. Bray and Dr. Amlani: Considering the projected future impact of HAS as outlined in Figure 7, what is your reaction to the authors' projection that the HAS workforce becomes larger than the Audiology workforce in ten years? Is this a problem for Audiology or an opportunity, and why do you feel that way?

Workforce Growth Model for Audiology and HAS (2012 to 2039)

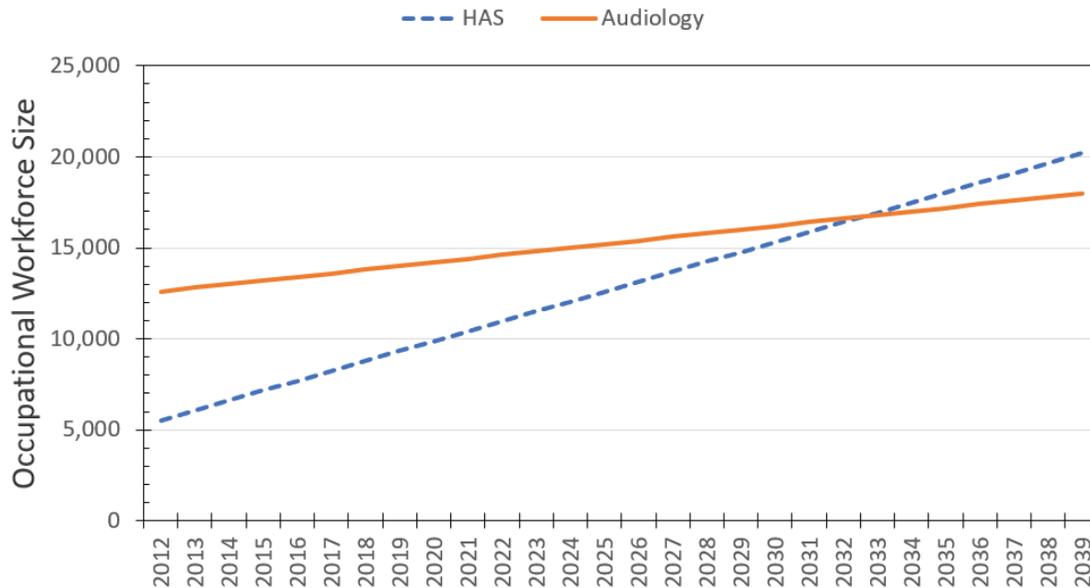


Figure 7. Predict future impact of the current Hearing Aid Specialist (HAS) workforce growth rate compared to that of the Audiology (AuD) workforce growth

Dr. Steele: Honestly, I'm surprised about the projections that the HAS workforce could outpace the Audiology workforce in the next 10 years; However, when you think about all the variables playing into the situation we are currently facing, it makes sense. I feel this could be an opportunity for Audiology because it may afford the profession the chance to utilize HAS within our larger professional framework to meet the demands of a growing population in need of Audiological and hearing care. For example, Audiology practices employing HAS that are licensed, well-trained, and practicing under their scope can be assets to the Audiologists and business.

Dr. Tarvin: There are little to no barriers to becoming an HAS. Reason stands that HAS will continue to grow if the opportunity exists and the barriers remain low to make a good living while doing it. This can become a problem for Audiology if Audiology does not continue to diversify and practice its full scope of care. We have to be seen more than a method of receiving hearing

aids from the overall healthcare perspective. It can also be an opportunity if Audiology can employ the benefits of HAS within its own care models.

Dr. Greenaway: Given the expanding patient base in the area of amplification and the relatively low barrier of entry for hearing aid dispensing versus audiology, I don't see any future where dispensers don't continue to grow their numbers and eventually surpass audiologists in the number of professionals. I think this represents more of an opportunity than a threat for our profession, as long as we are practicing at the top of our scope and we ensure other professions, like hearing aid dispensers, practice within the confines of theirs.

Dr. Kratzer: Although this may be cause for alarm for some individuals, I believe that this can be an opportunity if we let it. I have worked daily with an HAS for the last seven years. I feel that working together makes us both better professionals and allows us to better meet the needs of our patients. Our practice also works closely with HAS in the area who refer patients to us for services they cannot or do not provide. By the same token if we cannot offer a patient something they need that can be provided elsewhere we reach out to our colleagues. By seeking ways to bridge the gap between our two professions and finding ways to support each other and work together I believe we can all have successful and fulfilling careers and serve our patients well.

 **Dr. Bray and Dr. Amlani:** Continuing the discussion with respect to Figure 6 and Figure 7 above, is the future of Audiology to transition from the fitting and dispensing hearing aids to managing HAS who do the fitting and dispensing of hearing aids?

Dr. Steele: I believe it will be critical for Audiologists to always understand how to best fit and dispense hearing aids but in examining Figures 6 & 7 while considering the projections, it is realistic that Audiologists could and probably should manage HAS who they work with to meet the demands and address the Audiology workforce shortage. I know there are already existing Audiology practices who utilize this model, and our business has a planned transition to move in this direction in the coming 24-48 months. True for most businesses, it's most critical to find the right people whether that be an audiologist or HAS.

Ms. Kim: I hope that our profession will have more recognition and be able to utilize our full scope of practice. This may result in doing less fitting and dispensing hearing aids.

Dr. Tarvin: The idea could be to expand our hearing aid services workforce and outsource portions of our workload onto another profession (HAS) to which they are properly trained to complete the work to our standard of care. There needs to be a large paradigm shift within both professions to go from competing with one another to working in tandem to achieve the ultimate goal of improving the quality of life for people with hearing loss (Au.D. and HAS), auditory processing, and balance disorders (Au.D.).

Dr. Greenaway: There will likely be several avenues in which the audiologist-dispenser relationship will be able to exist. If audiologists are practicing their full scope of practice, having

dispensers working in their clinics, taking care of the hearing aid fitting and maintenance component of the practice, would be mutually beneficial. Dispensers would have a constant flow of business from the audiologists' diagnostic and consultative work and the audiologists will have their time freed up to focus on the more technical and demanding aspects of their practice. There will still be a place for relationships to form between independently practicing dispensers and audiologists, as well. I look to the optometrist-optician relationship as one proven roadmap which our professions could follow.

Dr. Kratzer: Audiologists transitioning away from fitting and dispensing hearing aids themselves in favor of managing HAS to do that work is a real possibility and one of the ways we could work together to address the hearing healthcare needs of our country.

"Audiologists transitioning away from fitting and dispensing hearing aids themselves in favor of managing HAS to do that work is a real possibility..."

— Kara Kratzer, Au.D.

Comment from Dr. Bray and Dr. Amlani: Audiologists who limit their clinical practice to ‘air, bone, speech, and fitting of hearing aids’ are essentially limiting themselves to the technical role of the hearing aid specialist. The preferred future for audiology is to practice at the top of scope of practice and includes expansive clinical opportunities in the complex world of the diagnosis and treatment of hearing aid balance disorders, consistent with a doctoring healthcare profession. Within that high-level role, comes the opportunity to manage audiology clinics who employ audiologists, hearing aid specialists, audiology assistants, and other methods to extend the audiologist’s impact.

Q Dr. Bray and Dr. Amlani: According to Figure 8, Projected Graying of America, the estimated (clinician) / (adult_with_hearing_loss) ratio is changing from 1/1,646 in 2000 to a projected 1/2,283 in 2030, an approximate 38% decline in providers to hearing-impaired adult (age 40 – 79). How do we go about meeting the public health / hearing healthcare needs of this growing segment of the population in the face of diminishing audiology resources?

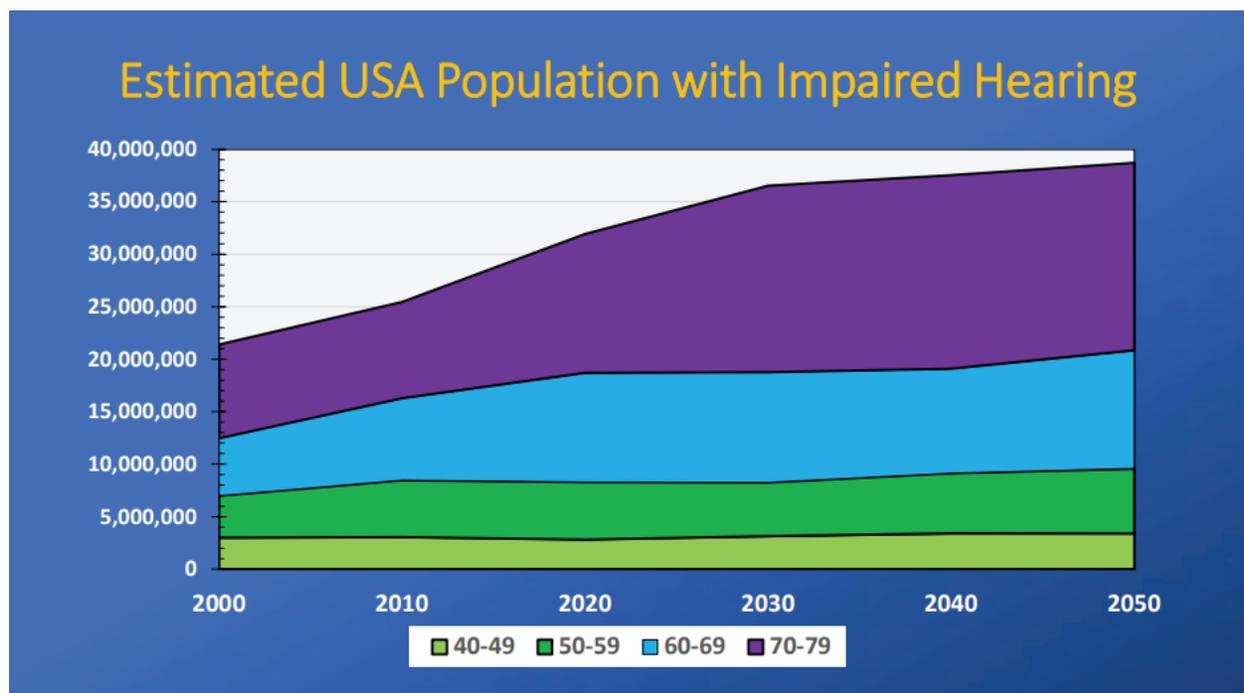


Figure 8. Graying of America: Predicted number of persons in the USA with impaired hearing (ages 40 to 79) between 2000 and 2050.

Dr. Steele: This may be occurring somewhat organically already especially as the data presented in this article support the growth of HAS. In addition, the introduction of OTC into the marketplace will likely open up availability for more complex audiological cases because a younger, more tech savvy, DIY generation can self-manage their early mild hearing loss leaving more availability for an Audiologist to assist an older, more complex patient with co-morbidities. The profession of Audiology may also need to examine other entry level or different level care providers. We could be stakeholders in investigating or creating career opportunities for different educational levels such as associates, bachelor’s or master’s degree specialists with the doctoral-level Audiology degree having the broadest scope capable of supervising other hearing/vestibular/rehab level providers within the larger profession.

Ms. Kim: In general, the public doesn’t realize how important hearing healthcare is and I get many questions about what audiologists do. Advocacy for our profession is personally crucial for me. I served as President of the Student Academy of Doctors of Audiology and lobbied for the Medicare Audiologist Access and Services Act. I discussed the bill for 10 sessions to legislative assistants and policy directors from both House of Representatives and Senate. We can’t let audiology resources diminish- we must use our voices to take a stand for our profession.



Dr. Tarvin: While the amount of people with hearing loss will be significantly increasing, this does not mean that everyone will address their hearing loss issues. With the changes to the delivery model with OTC and DTC hearing aids, some of this increased need will be handled through do-it-yourself options. The standard of care will need to change with more understanding of best practices and utilization of supplementary staffing. The use of audiology assistants, medical assistants, HAS within Au.D. clinics, for example. Audiologists have been completing a lot of the work that has not been required of a doctoral-level profession. The paradigm around how the work is distributed needs to shift to begin to meet the growing needs of the population's hearing healthcare needs.

Dr. Greenaway: The audiologist-to-patient ratio is daunting, but if our profession does the preparation work it doesn't have to be a crisis. Audiology has a responsibility to find solutions to meet the nation's audiologic needs in collaboration with other health professionals and policymakers. Incorporating audiology assistants and dispensers into audiology practices will work to improve the patient load of audiologists. Technological advancements like tele-audiology and over-the-counter hearing devices also have the potential to reduce the strain on audiologists.

Dr. Kratzer: We must get creative and be willing to work together with other professionals. In my clinic we utilize audiology assistants, which reduces the burden of administrative work and also allows us to see more patients in a day without sacrificing quality of care. As discussed earlier, working with HAS both in our clinic and others in our area has allowed us to provide even more care in an underserved population.

Comment from Dr. Bray and Dr. Amlani: We find it very interesting that our analysis of the number of adults (age 40-79) for the period 2000-2050 is consistent with Figure 1 from Freeman and Windmill (2017) projecting patient demand from 2010-2040 (image below). They conclude that for audiology to maintain (and defend) its professional scope of practice, while meeting patient demand, audiologists must embrace new technologies and audiology-extenders.⁹



Dr. Bray and Dr. Amlani: Does audiology, as a profession, have the responsibility to establish a workforce target size, based on population and demographic data, and then coordinate a plan of action to meet and maintain the target?

Dr. Steele: If we don't do it, who will? It seems if Audiology as a profession doesn't see themselves as stakeholders and more intentionally assert ourselves into our own future, then there will be a natural evolution (that we may not like or that might be too late to turn around) if something more coordinated and thoughtful isn't initiated. Dr's Bray and Amlani stated very eloquently that there is a responsibility of the profession to generate a workforce that can service the hearing and audiological needs of the population. The data and projections presented may be an important wake-up call for our professional associations such as ADA to seize the opportunity to steer the course. I'm not convinced that the academic community is best poised to fully make this happen on their own.

Ms. Kim: I believe we have the responsibility to further advocate for our field and better establish ourselves in healthcare. This can be accomplished by getting involved in professional organizations, lobbying at Capitol Hill, making social media content, etc. While I understand we are all busy and have our own personal life situations, doing a small act of advocacy can make a difference. I believe in the future of audiology and our worth in healthcare!

Dr. Tarvin: Audiology as a profession may not have the responsibility to establish a workforce target size but that does not mean it is a bad idea. We are a generally small profession with a large responsibility for helping people rehabilitate one of their body senses. The medical community in total has a responsibility to understand more about audiology's place in the medical landscape. We should be more leveraged as a peripheral health profession and be a part of healthcare teams. The greater the understanding of our care and services, the more resources we may be afforded. If our ability to bill insurance for the services we provide within our scope increase, receive proper reimbursement for those services, receive proper classification for our profession and skills within the Center for Medicare and Medicaid Services (CMS), and other victories are achieved, the interest in our profession may go up. Without an increase in respect and awareness and fundamental changes to systems (including education in medical schools regarding audiology) I do not see a realistic increase in our workforce. Since we are a small profession, we can work together to create change but others have to be willing to hear what we have to say (pun intended).

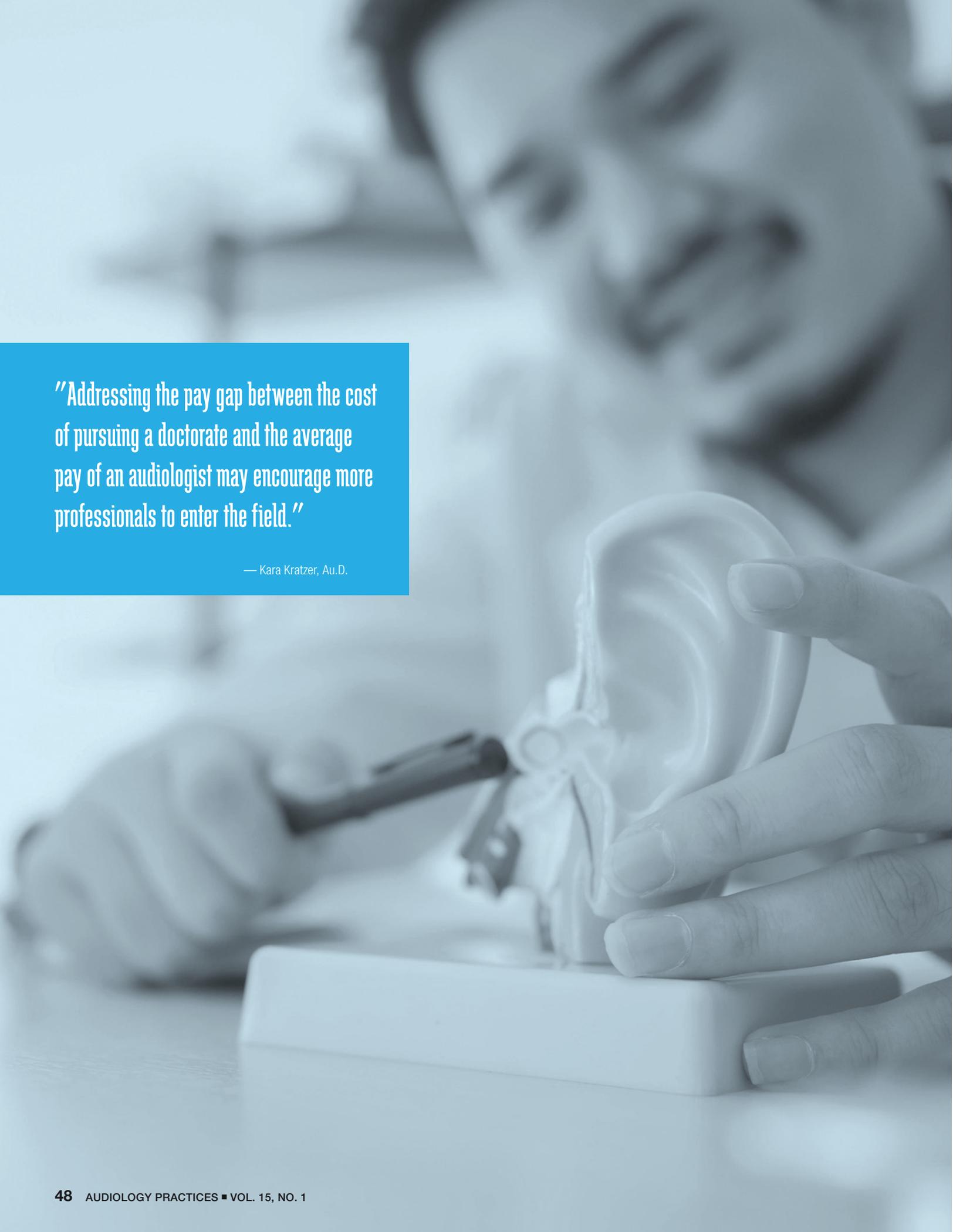
Dr. Greenaway: Audiology does need to pay more attention to geographic and demographic holes in care, though. We have to be better at recruiting audiologists who reflect the diversity in background and experience of our patients. We also need to make it more enticing for audiologists to work in rural and other underserved areas. Again, tele-audiology and audiology assistants can help fill in the gap for underserved areas, but they will never take the place of having an actual audiologist in those communities. In Oregon, we are beginning to look at state grants and loan forgiveness programs for medical providers in rural and underserved areas and exploring how audiology can be added as eligible providers. State and regional audiology associations are going to be vital in this kind of change.

Dr. Kratzer: While there will always be some factors outside our control, I do believe we have a responsibility to do the best we can for our patients. Being open to adapting our service models and working with other professionals will go a long way in bridging this gap. Additionally, advocating for our profession and promoting it to undergraduate programs may help in encouraging students to pursue a career in audiology. Lastly, addressing the pay gap between the cost of pursuing a doctorate and the average pay of an audiologist may also encourage more professionals to enter the field.

Comment from Dr. Bray and Dr. Amlani: Our work, and that of others, documents an anemic pattern of workforce growth in the 21st century, to which we previously wrote "these comparative numbers indicate that Audiology, as a profession, is showing a failure to thrive."¹⁰ The fundamental issue is: are we, as a profession, going to respond?

"I believe we have the responsibility to further advocate for our field and better establish ourselves in healthcare."

— Shannon Kim, B.S.



“Addressing the pay gap between the cost of pursuing a doctorate and the average pay of an audiologist may encourage more professionals to enter the field.”

— Kara Kratzer, Au.D.

Dr. Bray and Dr. Amlani: Thank you to our illustrious panel for providing additional insight into challenges and opportunities presented by the audiology workforce data and recommendations for the profession of audiology and audiologists to address the growing audiologic health care needs of the population, given the projected shortage of audiologists. ■

References

1. Bray, V. & Amlani, A. (2022). Audiology Workforce: A New Analysis of the Audiology Workforce, Benchmarked to Other Healthcare Professions. *Audiology Practices*, 14(4),42-58.
2. Bray, V. & Amlani, A. (2021, April 14-16). *Historical Trends in US Audiology Workforce, Benchmarked to Other Healthcare Professions* [Poster Session]. American Academy of Audiology, Virtual Conference, USA.
3. Bray, V. & Amlani, A (2019, November 16). *A Critical Review of Audiology Employment and Provision of Hearing Healthcare Services* [Conference Session]. Academy of Doctors of Audiology Conference, National Harbor, MD, USA.
4. Amlani, A. & Bray, V. (2022, 30 March – 02 April). *Analysis of the AuD Educational Debt-to-Income Ratio, Benchmarked to Other Healthcare Professions* [Poster Session]. American Academy of Audiology Conference, St. Louis, MO, USA.
5. Windmill IM, Freeman BA. (2013). Demand for audiology services: 30-yr projections and impact on academic programs. *J Am Acad Audiol*, ;24(5):407-416. doi: 10.3766/jaaa.24.5.7. PMID: 23739060.
6. <https://www.asha.org/siteassets/uploadedfiles/communication-sciences-and-disorders-education-trend-data.pdf>
7. Bray, V. & Amlani, A. (2022, November 18). *Analysis of Audiology and the (4-year) AuD Degree* [Conference Presentation]. American Speech Language Hearing Association Conference, New Orleans, LA, USA.
8. Marquardt, K. (2017, July 18). *Supply and Demand of Audiologists in the US, part 3*. Hearing Health and Technology Matters (HTTM).
9. Freeman, B & Windmill. (2017, February 7). *Demand an Audiologist, but will there be one available?* Hearing Health and Technology Matters (HTTM).
10. (See 2).

Victor Bray, MSC, PhD, FNAP is an associate professor at Salus University Osborne College of Audiology in Elkins Park, PA. He can be reached at vbray@salus.edu.

Amy Amlani, PhD, FNAP is President of Otolithic, LLC, with its global headquarters in Frisco, TX. He can be reached at otolith@outlook.com.

Bryan Greenaway, Au.D. is an assistant professor at Pacific University's School of Audiology in Hillsboro, Oregon. Dr. Greenaway serves as the President of the Oregon Academy of Audiology.

Shannon Kim is an audiology extern at the Cleveland Clinic and a student at A.T. Still University. During her 2022 term as national SADA President, Ms. Kim represented thousands of student voices by advocating for the Medicare Audiologist Access and Services Act.

Kara Kratzer, Au.D. is a clinical audiologist at Southeast Kentucky Audiology in Corbin, Kentucky. Dr. Kratzer is a member of the Board of Directors of the Kentucky Academy of Audiology.

Alexandra Tarvin, Au.D. is the founder of Elevate Audiology Hearing and Tinnitus Center in Easley, South Carolina. Dr. Tarvin is a Past President of the South Carolina Academy of Audiology.

Timothy C. Steele, Ph.D. is President and CEO of Associated Audiologists, Inc. an Audiology private with eight clinics and 36 employees in Northeastern Kansas and Northwest Missouri area.



HAVE YOU HEARD?

AuDacity 2023 to Go Beyond with Keynote Presentation from Dr. Frank Lin on Key Findings from the ACHIEVE Study

Register for AuDacity 2023 – November 2nd–5th at the Hyatt Coconut Point Resort in Bonita Springs, Florida.



On Friday, November 3, 2023, ADA will welcome Frank R. Lin, M.D., Ph.D., Director of the Cochlear Center for Hearing and Public Health and a Professor of Otolaryngology, Medicine, Mental Health, and Epidemiology at the Johns Hopkins University School of Medicine and Bloomberg School of Public Health.

Dr. Lin will discuss outcomes from the ACHIEVE study, which is a \$20M NIH-funded randomized trial investigating if treating hearing loss can reduce the risk of cognitive decline in older adults. AuDacity attendees will have an unprecedented opportunity to learn about this ground-breaking research and its implications for audiologists and the patients and communities they serve.

Dr. Lin completed his undergraduate degree in biochemistry at Brown University and his medical education, residency in otolaryngology, and Ph.D. at Johns Hopkins. Dr. Lin joined the faculty at Johns Hopkins in 2010 and is a practicing otologist with expertise in the medical and surgical management of hearing loss. His epidemiologic research established the impact of hearing loss on the risk of cognitive decline, dementia, and brain aging in older adults and served as the basis of the 2017 Lancet Commission on dementia conclusion that hearing loss was the single largest potentially modifiable risk factor for dementia.

Visit www.audiologist.org to register for AuDacity 2023. Book your hotel room for AuDacity early – we expect to sell out: <https://www.audiologist.org/events/audacity/hotel-information>.

ADA-Phonak March Mega Series: OTC Hearing Aids – Mastering the Market and the Business Model to Maximize Opportunities in Your Practice Now Available On-Demand

Log on and lean in to this innovative webinar series, presented by ADA and Phonak! Visit www.audiologist.org to access all three sessions.

OTC Hearing Aids – Mastering the Market and the Business Model to Maximize Opportunities in Your Practice.

This three-part webinar series, featuring Dr. Brent Edwards, Dr. Larry Humes, and Dr. Michael Valente offers attendees valuable insight into the OTC hearing aid market, including consumer dynamics, and demonstrates how to maximize business opportunities in your practice.

Part I: Defining the Addressable Market of OTC vs. Prescription Hearing Aids: Expanding the Market with Something for Everyone

Presenter: Brent Edwards, Ph.D.

Moderator: Shannon Basham, Au.D.

[Scan the QR Code to view this session:](#)



Abstract: Hearing healthcare is evolving faster than it ever has. New approaches to hearing health service delivery are providing alternatives to face-to-face practitioner care that has been the cornerstone for hearing healthcare for decades. Additionally, a new segment of people with hearing difficulty is emerging as an opportunity for hearing healthcare to provide solutions. All these changes present both challenges and opportunities for hearing care providers and their business.

At the forefront of these changes is the market introduction of OTC hearing aids. This presentation will provide an overview of different market segments and where OTC hearing aids and other solutions fit into a broader view of hearing healthcare. Research at the National Acoustic Laboratories (NAL) in a variety of areas to understand the OTC market, device use and acceptance will be reviewed, with insight into understanding these changes and provide guidance on how hearing care professionals can manage this evolution in hearing healthcare.

Part II: Empowering Adults to Manage Their Hearing Problems and How Audiologists Can Help

Presenter: Larry Humes, Ph.D.

Moderator: Shannon Basham, Au.D.

[Scan the QR Code to view this session:](#)



Abstract: Despite the widespread presence of mild-to-moderate hearing loss in adults and the positive outcomes that have been demonstrated for intervention with hearing aids less than 20% of those who could benefit from hearing aids seek them out and use them. The problem of limited uptake and use of hearing aids has been largely attributed to poor accessibility and affordability of Hearing Healthcare (HHC) services. This long-standing problem was the primary impetus for the OTC Hearing Aid Act and the adoption of FDA guidelines for those devices in 2022. This presentation will describe a self-driven, rather than professional-driven, approach to auditory wellness, one that assumes access to OTC hearing aids, and will present evidence in support of its viability for adults with mild-to-moderate hearing loss. The role of the hearing healthcare provider in such a model will also be discussed.

Part III: Operationalizing a Business Model Including OTC

Presenter: Michael Valente, Ph.D.

Moderator: Shannon Basham, Au.D.

[Scan the QR Code to view this session:](#)



Abstract: OTC hearing aids can present an opportunity for practice growth and should be viewed as an opportunity and not a threat. This presentation will provide an overview of how OTC hearing aids were integrated into a clinic practice using an entry-level hearing aid, dispensed using an unbundled approach. The presentation will present information on how to create an unbundled dispensing model and provide information on how to include remote care and remote fine-tuning.

Meet the Presenters



Brent Edwards, Ph.D.

Brent Edwards Ph.D. is the Director of the National Acoustic Laboratories (NAL), an Australian Federal Government hearing loss research centre, where he is currently leading research and innovation initiatives that focus on transforming hearing healthcare. For over 22 years he headed research at major hearing aid companies (GN ReSound, Starkey) and at Silicon Valley startups that have developed innovative technologies and clinical tools used worldwide. Dr. Edwards founded and ran the Starkey Hearing Research Center in Berkeley, California that was a leading site for research in hearing impairment and cognition. Dr. Edwards is a Fellow of the Acoustical Society of America, a Fellow of the International Collegium of Rehabilitative Audiology and an Adjunct Professor at Macquarie University.



Larry E. Humes, Ph.D.

Larry E. Humes, Ph.D. has served as associate editor and editor for several audiology journals. Professor Humes has received the *Honors of the Association* and the *Alfred Kawana Award for Lifetime Achievement in Publications* from the American Speech-Language-Hearing Association and the *James Jerger Career Award for Research in Audiology* from the American Academy of Audiology. In 2020, he gave the *Carhart Memorial Lecture* at the American Auditory Society.

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Medicare Denials of AB Modifier

BY KIM CAVITT, Au.D.

ADA is aware of the Medicare denials associated with the AB modifier. This was expected.

Medicare clearly indicated, in the Final Rule, that implementation of this modifier may be slow. They stated:

“Aligning our final policy to use modifier AB...necessitates multiple changes to our claims processing systems, which will take some time to operationalize, possibly until mid-year 2023. Until such time, audiologists may use the AB modifier that is available for dates of service on and after January 1, 2023, to provide services/tests to beneficiaries who have directly accessed their services. Audiologists who furnish these services without an order are expected to follow our policy and safeguards built into the AB modifier, as above and in the code descriptor below. As we noted above, we plan to communicate to audiologists via provider education and other guidance, including the Audiology Services webpage page at <https://www.cms.gov/audiology-services>”.

Please note that Medicare does document the AB modifier on their [Audiology Services](#) page. This documentation can be used in any appeal.

Practices have options available to them to manage this situation. All options have pros and cons. It is recommended that each practice select the option that is the most efficient and cost effective for their practice and patients. The options are:

1. Continue to get physician orders, for all traditional Medicare beneficiaries, until April-June 2023,
2. Hold Medicare claims that include the AB modifier until April-June 2023 (Medicare allows 365 days to submit claims) or
3. Use the information above to appeal claims denials.

ADA offers member resources on implementation of the 2023 Medicare Physician Order changes and AB modifier:



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Please do not hesitate to contact Kim Cavitt at kim.cavitt@audiologyresources.com with any questions or concerns. This access is a value-added benefit of ADA membership. ■

Dr. Kim Cavitt was a clinical audiologist and preceptor at The Ohio State University and Northwestern University for the first ten years of her career. Since 2001, Dr. Cavitt has operated her own Audiology consulting firm, Audiology Resources, Inc. She currently serves on the State of Illinois Speech Pathology and Audiology Licensure Board. She also serves on committees through AAA and ASHA and is an Adjunct Lecturer at Northwestern University.

PRESIDENT'S MESSAGE

Continued from page 3

of success and educate them about the different treatment options and motivate them to encourage more people do something about their hearing loss and refer patients to audiologists.

Speaking of receiving patient referrals, treating patients with tinnitus and vestibular disorders is so important to our community and I encourage you to read the about treating tinnitus across a broad population and operating a balance center. Diving in deeper and helping your patients to the fullest scope of practice is the best way to not only stand out in your community, but also to truly help them when others refer to you for treatment. Finally, don't miss the follow-up article on reader reactions to the audiology workforce issue from the December 2022 issue, which further makes the case for practicing at your full scope and offers perspectives on delegating hearing aid services to hearing aid specialists (HAS) in favor of performing services at the top of your scope to meet growing population needs and mitigate the projected audiologist shortage.

As you and your practice evolve and grow, you may find yourself going back to the fundamentals. The changing of seasons can bring joy and discomfort at varying times, and I believe this edition of Audiology Practices will help you and your practice revisit what you might have focused on in the past and can help you to move forward into the future. I look forward to evolving and changing with you! ■

EDITOR'S MESSAGE

Continued from page 5

As the Figure above shows, in-person care yields a NPS of 30.4, while both remote fitted hearing aids result in a score of -4.0 and self-fitted hearing aids generate a NPS of 3.0. Granted, the total number of remote fitted and self-fitted hearing aids is paltry compared to the large number of those fitted in-person. Perhaps as more people buy OTC, these numbers will change. At least for now, audiologists who lean into best practice care, delivered in-person, are more likely to create an abundance of patients who actively promote their practice to others. These MarkeTrak 2022 results indicate that — even in the face of OTC and remote care — most patients want just a little of that human touch. ■

HEADQUARTER'S REPORT

Continued from page 7

the deficiencies with many current plan benefit structures, and the opportunities to reconstruct and design plan benefits to reward high-value services and improved patient outcomes.

- AHIP and its members have tremendous leverage to influence Congress and administrative agencies such as the Centers for Medicare and Medicaid Services (CMS). They are, therefore, an important stakeholder for audiologists and other health care providers.

Attending AHIP gave me a new perspective on health plan benefit design and the challenges faced by benefit sponsors and government regulators. It was refreshing to hear the perspectives of plan sponsors and actuaries about why they structure plan benefits, such as hearing benefits, the way that they do. Attending and networking also positioned ADA as a go-to resource for these decision-makers. Building relationships with health plan decision makers will provide ADA and its members with more opportunities to influence and inform them—and will allow us to be better informed about emerging policy trends, and their implications for audiologists and their practices.

I look forward to working with all of you to advance advocacy initiatives that advance evidence-based patient care and the profession of audiology! ■



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ADA's Practice Resource Library offers a comprehensive collection of off-the-shelf forms, documents, and guidance materials. These resources will assist audiologists and their staff with practice operations, compliance, and patient management.

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- Notice of Non-Coverage
- Office and Financial Policies
- Patient Registration Form
- Policies and Procedures Manual
- Price Quote Form

ADA members receive a discounted rate when purchasing any of the above forms. Visit audiologist.org/forms for details!



HAVE YOU HEARD?

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Michael Valente, Ph.D.

Michael Valente, Ph.D. is Professor Emeritus of Clinical Otolaryngology at Washington University in St. Louis. For 34 years he directed the Division of Adult Audiology. In that position, Mike was active in the clinic, directed the Hearing Aid Research Lab, taught graduate courses in amplification and the business component of Audiology and he administered the Division of Adult Audiology. He received his Ph.D. from the University of Illinois at Urbana-Champaign in 1975.

Shannon Basham, Au.D.

Shannon Basham, Au.D. is the Senior Director of Audiology and Education for the Sonova Wholesale Hearing Instrument business. An audiologist herself, she brings years of experience to her current role where she is dedicated to educating and inspiring other hearing healthcare professionals to provide life changing solutions that meet the individualized needs of patients with hearing loss. Curious by nature, she seeks out all things that lead to improve the human experience and overall well-being. Although rarely home, she, her husband Mike, and their son John Michael call the Atlanta area home.

Continuing Education Information



The Academy of Doctors of Audiology is approved by the American Academy of Audiology to offer Academy CEUs for this activity. The program is worth a maximum of 0.3 CEUs. Academy approval of this continuing education activity is based on course content only and does not imply endorsement of course content, specific products, or clinical procedure, or adherence of the event to the Academy's Code of Ethics. Any views that are presented are those of the presenter/CE Provider and not necessarily of the American Academy of Audiology. Each webinar is worth a maximum of 0.1 CEUs each. ■



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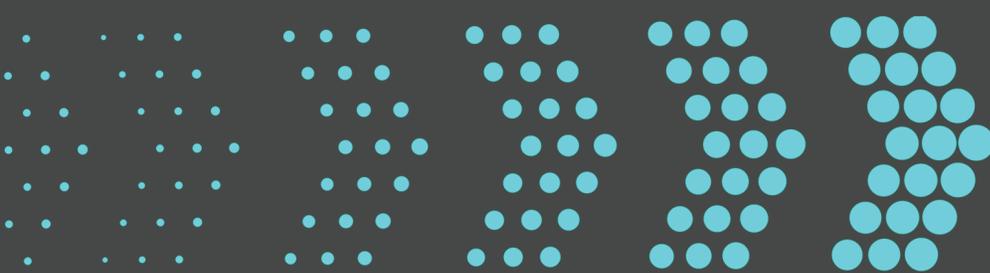
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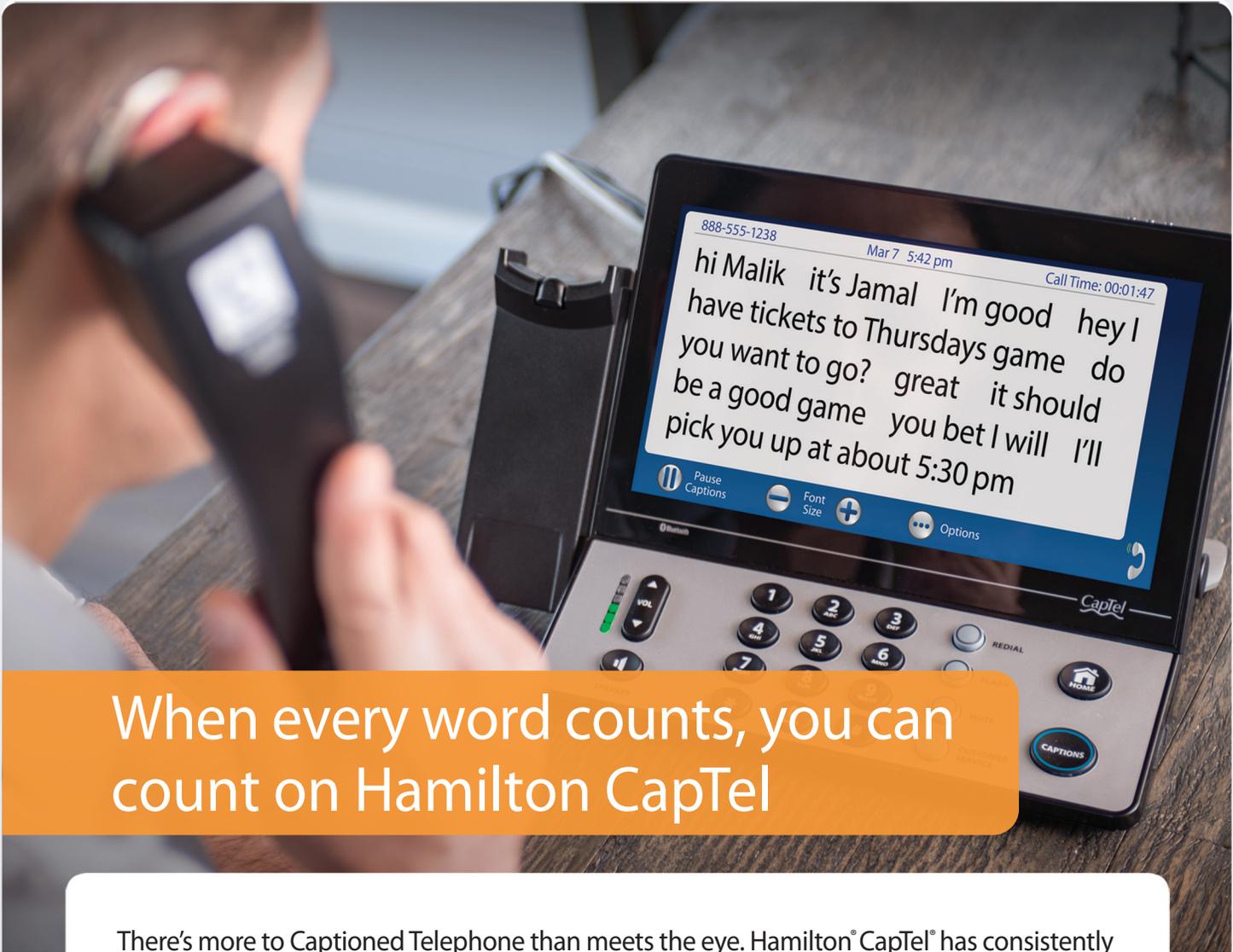


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