

# An Interventional Audiology Program: Improving Access, Raising Awareness

BY CATHERINE V. PALMER

Interventional Audiology includes identifying and treating hearing loss when hearing loss is not the primary concern of the patient or health care provider, but is expected to negatively impact health outcomes. Interventional Audiology happens outside of the audiology clinic and within busy outpatient and inpatient settings.

Undetected and untreated hearing loss have negative consequences for patients, families, health care providers and health care systems, resulting in excess medical spending due to adverse events, hospitalization and readmission due to misunderstood communication. Seniors with untreated hearing loss are less satisfied with their health care experience. Over 60% of older adults have hearing loss, yet only about 18% use personal amplification, resulting in the majority of aging individuals being faced with effortful or inaccurate communication during health care visits which present high stress, complex listening environments.

A number of national guidelines for inpatient and outpatient settings include recommendations for hearing screening and attention to adequate communication for older adults. We developed our Interventional Audiology program to address the problem of untreated hearing loss negatively impacting health care interactions in inpatient, outpatient, home health and senior living environments. Currently, we use three models to achieve the goal of identifying and treating hearing loss during health care interactions: 1) embedding an audiology clinic within another setting, 2) assistants providing hearing screening and non-custom amplifiers in interprofessional clinics, and 3) providing and supporting the use of non-custom amplifiers in diverse health care settings.

## Embedded Audiology Clinics

*EAR* (Embedded Audiology Resources, 2016-present). We have embedded audiology services into two Geriatric Outpatient Clinics. In this way, individuals can be seen for their audiological needs in the same clinic where they see their geriatrician. There are non-custom amplifiers in each treatment room to be used during health care interactions. Individuals can then have a full hearing evaluation and treatment recommendations in the same clinic if

warranted. Interestingly, a number of individuals purchase the simple amplifier for their hearing needs once they have experienced it in the clinic.

*HearCARE* (Hearing Communication Assistance for Resident Engagement, 2015-present). We provide audiology services once per month in the 33 University of Pittsburgh Medical Center (UPMC) Senior Living communities (Independent, Assisted Living/Personal Care, and Skilled Nursing). In addition, we have introduced the services of a Communication Facilitator in several locations. This is an individual who supports communication throughout the community by providing supportive services (e.g., managing hearing aids, providing non-custom amplifiers, supporting group communication and managing phone and television use).

## Assistants Screening Hearing and Providing Amplifiers

Our audiology assistants are part of the interprofessional teams in the UPMC outpatient Trauma, Survivorship and Perioperative clinics. All of these clinics allow patients to interact with multiple providers to coordinate care. In these clinics, the audiology assistant is first in the room to screen hearing and provide amplifiers when needed to support communication through the day. As part of the perioperative clinic (pre-surgery rehab), it is noted in the patient record that an amplifier was used, allowing for an amplifier to be provided through pre-op and post-op care.

## Supporting the Use of Non-Custom Amplifiers

*UHEAR* (UPMC Hearing Education and Amplification for Recovery, 1988-present). In our inpatient program we provide non-custom amplifiers to any patient identified as having untreated hearing loss. The inpatient takes the amplifier home or on to rehab upon discharge.

*IHEAR* (Interprofessional Help Encouraging Auditory Rehabilitation). We train and support other professionals in hearing screening and/or non-custom amplification provision. An example of this type of program includes our work with 167 home health rehabilitation specialists who provide amplifiers during home health

# Teaming Up with Audiology

BY JONET VACSULKA

interactions (2018-present). Observations in the home make these providers very aware of hearing ability.

We track the relationship between the answer to “Do you think you have hearing loss?” with the results of the hearing screenings and find consistently that fewer than 50% of individuals correctly self-identify that they have impactful hearing loss as defined by the World Health Organization; (this is more than a mild hearing loss.) In addition, untreated hearing loss may be mis-identified as cognitive decline. Although individuals with more severe hearing loss will be identified, individuals with mild to moderate hearing loss will often go unidentified without a screening program in place.

Our interventional audiology models are designed to be overseen by audiologists who specialize in hearing and communication and are largely implemented with extenders (audiology assistants) who are supervised by audiologists. There certainly is room for other models, but we feel strongly that the involvement of audiology supports appropriate screening protocols and recommendations, as well as identifying efficacious amplifiers for use in these situations. **HL**

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Patients with brain tumors come to our clinic for radiation treatment. This type of treatment can last from a few hours to the majority of the day, and includes important communication throughout the treatment. These patients experience conscious sedation, meaning that they are awake and are being provided with instructions, and may have questions throughout the process. We identify individuals who may not be hearing easily through family and patient report and our own observation. If hearing is creating a barrier for communication, we provide a non-custom amplifier. Even individuals who use hearing aids have to remove them during some of the procedures, so using the non-custom amplifiers helps these individuals as well. The amplifiers allow us to obtain consent, provide directions and answer questions without having to raise our voices to communicate with patients.

We introduce amplification use by saying, “You’ll be getting a lot of information today and I think using an amplifier will make this easier for you.” The amplifier makes communication easier for everyone.

Teaming up with audiology has enhanced our ability to provide patient-centered care. One man comes to mind who had a very difficult diagnosis and was barely participating as he started his day with us. We provided him with an amplifier and his eyes lit up, he was amazed that he could hear. We sent him home with the amplifier so he could spend the time he had communicating on his own terms, hearing and answering questions himself.

*Jonet Vacsulka, RN, BSN is a clinician in the UPMC Gamma Knife Center and in this role coordinates activities as well as provides direct clinical care. Jonet has a history of hearing loss and uses personal amplification. This gives her insight into the needs and concerns of patients with hearing loss and has made her very supportive of the work in Interventional Audiology. She is acutely aware of the need to provide patients with a device to assist with hearing and communication in the medical setting.*



## News and Notes

### HLAA Communication Access in Health Care Program Projects:

Participation in sessions at American Speech-Language-Hearing Association Annual Convention, November 2021

- Research Symposium: Engaging Diverse Stakeholders in Achieving Equitable Healthcare for Persons With Communication Disabilities (coordinated by Disability Equity Collaborative)
- Advocating for Medical Communication Access for Adults With Hearing Loss (panel presentation)

Meeting with Association of American Medical Colleges (AAMC) telehealth equity competencies team, October 2021

Creation of Constituent Call to Action:

- Call for communication access stories related to telehealth experiences. (Please share your anecdotes about telehealth experiences by emailing the Communication Access in Health Care program at [healthcareaccess@hearingloss.org](mailto:healthcareaccess@hearingloss.org).)



Left to right: Peggy Ellertsen; Nicholas Reed, Ph.D.; Joseph Montano, Au.D.; Toni Iacolucci