

February 27, 2024

Chair Joseline A. Pena-Melnyk
Health, Government Operations (HGO)
Room 241
House Office Building
Annapolis, Maryland 21401

RE: HB 464 Health Occupations - Practice Audiology – Definition

Position: SUPPORT

Madam Chair Pena-Melnyk, Vice Chair Cullison, and Committee Members,

My name is Dr. Melissa Segev, and I am in full support of HB 464, to modernize the definition of audiology. I am a doctor of audiology and small business private practice owner in Maryland. I have been practicing audiology for over 15 years and love being able to improve the quality of life for so many Maryland residents. I am going to discuss how audiologists can increase patient care with minimal risk by ordering radiographic imaging and lab work when appropriate. Not doing so is a huge inconvenience to my patients, as they need on average 4 extra appointments for the referral appointment and results, costing extra money with each visit at the referral's office and often co-payments, and time for the patients who do not always have it. Often patients need rides, especially as they age. Or they are working and time away from work is not always an option.

Ordering lab work during a medical history assessment can show underlying conditions that may impact hearing and balance. Hearing loss or dizziness may be associated with autoimmune disorders, diabetes, heart problems, neuropathy, infections, medications, etc....

Certain medications are ototoxic, meaning they can cause hearing loss and/or dizziness. Medications such as antibiotics, chemotherapy agents, erectile dysfunction medicines, or even high doses of over-the-counter pain relievers, like ibuprofen and aspirin are known to cause hearing loss and/or dizziness. Monitoring blood levels of these patients is very important as the dosage or duration between taking the medicines can often be adjusted to prevent further damage. Many of these patients are not ENT patients. Furthermore, they are referred from primary care, oncologists, cardiologist, dermatologist, dentists etc... Referrals to an otolaryngologist are not always necessary since they are not the current physician prescribing the medication or managing their treatment.

Blood work can often aid in screening for systemic diseases that can manifest in the ear, either with hearing loss or dizziness. Balance disorders may be caused from metabolic or hormonal disorders. Having those

results while treating, evaluating, diagnosing, and managing patients with dizziness can aid in differential diagnosis. Tinnitus may also be caused from metabolic or hormonal disorders.

Blood work results can provide a great deal of information, while collaborating with other health care professions in the treatment of patients. Having a qualified healthcare professional order, not perform, blood results can help lower cost per visits, and increase patient care.

Radiographic imaging is also important when managing patients. Unilateral hearing loss, dizziness and tinnitus are symptoms of an acoustic neuroma. Acoustic neuromas are benign tumors that grow on cranial nerve VIII. Imaging studies are the only way to confirm this, although audiologic testing can suggest a tumor is present. If an acoustic neuroma is identified, those patients will be referred to a neurotologist, a physician who specializes in the treatment of acoustic neuromas. They are rarely handled by local ENT offices, especially in rural areas of Maryland. I have 2 offices in rural areas where patients drive over an hour to see our providers. If they had to travel further, I truly believe they would not seek treatment. If other abnormalities are seen, a referral would be made to a local ENT physician if appropriate, who can further manage their treatment. On occasion, monitoring of the acoustic neuroma is necessary and this is done through audiologic testing and imaging studies.

MSO is suggesting that audiologists check in with the board to tell them what they intend to provide and demonstrate proof of training when treating patients. My proof is the education I received which you can see further on the attachments. We have two accrediting bodies who manage and set the didactic and clinical standards of all Doctor of Audiology programs in the country. They are the Council on Academic Accreditation (CAA) and the Accreditation Standards for the Doctor of Audiology (Au.D.) Program (ACAE). As you can see from the enclosures at the end of this testimony, the CAA and ACAE include professional practice competencies in the areas of diagnosis, management, treatment, and evaluation, which is what our bill states. Both programs use those words when preparing the curriculum for our doctorate degree. You can see the rigorous education, training, and clinical hours (over 1000 clinical hours) spent to obtain the Au.D. degree.

This further leads to MSOs other amendment, which is the referral of a person with auditory and vestibular dysfunction where audiologists would need to refer to a physician, physician assistant, or nurse practitioner. Both a physician assistant and nurse practitioner have less education and clinical training of the ear than a doctor of audiology. Furthermore, the referral to those suggested by MSO when not appropriate, will significantly increase patient cost. How insulting of MSO to suggest doctors of audiology are uneducated, unqualified, and redundant in the healthcare system. We are more than the 'girl down the hall', which is how some ENT physicians view audiologists and the care they can provide. ENT physicians often make suggestions to patients on hearing aid treatment, which is out of their scope and most always incorrect.

MSOs amendments make it appear that there is a turf war and lack of respect between the professions, but on the practice level there is not. There is a huge amount of respect between the professions. This is attempting to perpetuate fear that patients can be harmed when the opposite is true. This appears to be a concern of



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money and how MSOs is suggesting inappropriate referrals just to increase their salaries, rather than what is best for patient care. There is always a story about a patient who was mismanaged or someone dropped the ball, but those are few and far between. Referrals are made often when patients need further testing or treatment to ENT physicians, however, our point is that this a huge problem in the system and those patients can be safely managed by doctor of audiologists. Everyone has a story to tell about how they saved a patient or helped a patient who was mismanaged previously.

The Johns Hopkins ACHIEVE trial was the first of its kind. It is a multicenter randomized trial to determine if treating hearing loss in older adults reduces the loss of thinking and memory (cognitive decline) that can occur with aging. The ACHIEVE study looks at other health outcomes, results of which will be published over time, including: mental health and well-being, physical function, and health care use. The fitting of hearing aids in the study was by audiologists only, and the results revealed that hearing intervention reduced cognitive change by 48% over 3 years and hearing intervention benefited the heart health study participants the most. In older adults at increased risk for cognitive decline, hearing intervention with audiologic counseling and hearing aid fittings by audiologists slowed down cognitive decline. MSO suggests that audiology is a non-medical profession and we are unable to perform health screenings on patients. The FDA classifies hearing aids as class I and class II medical devices. The ACHIEVE study showed a massive impact on the aging population in our country and accessibility to audiology care. Audiologists are the exact professionals who can perform cognitive screenings, blood pressure monitoring, and treatment of hearing loss via hearing aids that will have a massive impact on Maryland residents.

The amendments to this bill presented from MSO are not only offensive, suggesting that audiologists are uneducated, but highly unrealistic. I hope this helps understand the importance of the audiologist in the healthcare system and how modernizing our profession is crucial in the future of healthcare. This would give patients the ability to be managing in a more comprehensive and less expensive way.

I ask for your favorable report on HB 464. This would be a huge improvement in patient care for all Maryland residents. And as you can see, doctors of audiology are highly qualified to work along ENT physicians to help all who need us.

Sincerely,

A handwritten signature in black ink that reads 'Melissa J. Segev'.

Melissa Segev, Au.D.
Doctor of Audiology
MD License: # 01149

Enclosures (2)



MARYLAND ACADEMY OF
AUDIOLOGY

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- CAA Accreditation Standards for Au.D. Programs
- ACAE Standards for Au.D. Programs

CAA Accreditation Standards for Au.D. Programs

Offer a plan of study that encompasses the following domains:

- professional practice competencies;
- foundations of audiology practice;
- identification and prevention of hearing loss, tinnitus, and vestibular disorders;
- assessment of the structure and function of the auditory and vestibular systems as well as the impact of any changes to such systems;
- intervention to minimize the effects of changes in the structure and function of the auditory and vestibular systems on an individual's ability to participate in his or her environment.

DIAGNOSIS, AND EVALUATION

3.1.2A Foundations of Audiology Practice: The program includes content and opportunities to learn so that each student can demonstrate knowledge of the

- embryology, anatomy, and physiology of the auditory, vestibular, and related body systems;
- normal aspects of auditory and vestibular function across the lifespan;
- normal aspects of speech production and language function across the lifespan;
- normal aspects of speech perception across the lifespan;
- effects and role of genetics in auditory function, diagnosis, and management of hearing loss;
- effects and role of genetics in vestibular function, diagnosis, and management of vestibular disorders;
- effects of chemicals and other noxious elements on auditory and vestibular function;
- effects of pathophysiology on the auditory, vestibular, and related body systems; August 2017, rev. January 2023 Standards for Accreditation Page 11 of 41
- medical and surgical interventions that may be used to treat the results of pathophysiology in these systems;
- interaction and interdependence of speech, language, and hearing in the discipline of human communication sciences and disorders;
- effects of hearing loss on the speech and language characteristics of individuals across the life span and the continuum of care;
- effects of hearing impairment on educational, vocational, social, and psychological function and, consequently, on full and active participation in life activities;
- physical characteristics and measurement of simple and complex acoustic stimuli; • physical characteristics and measurement of non-acoustic stimuli (e.g., EEG, tactile, electrical signals);
- methods of biologic, acoustic, and electroacoustic calibration of clinical equipment to ensure compliance with current American National Standards Institute (ANSI) standards (where available) and other recommendations regarding equipment function;
- principles of psychoacoustics as related to auditory perception in individuals with normal hearing and those with hearing loss;
- principles and practices of research, including experimental design, evidence-based practice, statistical methods, and application of research to clinical populations.

EVALUATION

3.1.4A Assessment of the structure and function of the auditory and vestibular systems as well as the impact of any changes to such systems The program provides academic content and clinical education experiences so that each student can learn and demonstrate knowledge and skills in order to

- evaluate information from appropriate sources to facilitate assessment planning;
- obtain a case history;
- perform an otoscopic examination;
- remove cerumen, when appropriate;
- administer clinically appropriate and culturally sensitive assessment measures; August 2017, rev. January 2023 Standards for Accreditation Page 12 of 41
- perform audiologic assessment using behavioral, physiological (e.g., immittance, wideband reflectance, evoked potentials), psychophysical, and self-assessment tools;
- perform audiologic assessment using techniques that are representative of the challenges listeners may face in everyday communication situations;
- perform assessment to plan for rehabilitation;
- perform assessment to characterize tinnitus;
- perform balance system assessment and determine the need for balance rehabilitation;
- document evaluation procedures and results;
- interpret results of the evaluation to establish type and severity of disorder;
- generate recommendations and referrals resulting from the evaluation processes;
- provide counseling in a culturally sensitive manner to facilitate understanding of the hearing loss, tinnitus, or balance disorder of the individual being served;
- maintain records in a manner consistent with legal and professional standards;
- communicate results and recommendations orally and in writing to the individual being served and other appropriate individual(s);
- engage in interprofessional practice to facilitate optimal assessment of the individual being served;
- assign the correct Common Procedural Terminology (CPT) code(s) and the correct International Classification of Diseases (ICD) code(s);
- apply the principles of evidence-based practice;
- select and use outcomes measures that are valid and reliable indicators of success in assessment protocols and in determining the impact of changes in structure and function of the auditory and vestibular systems
- administer clinically appropriate and culturally sensitive self-assessment measures of communication function and functional assessment tools for individuals across the lifespan and the continuum of care,
- administer clinically appropriate and culturally sensitive scales of communication function to communication partners of the individual being served,
- determine contextual factors that may facilitate or impede an individual's participation in everyday life.

TREATMENT AND PREVENTION

3.1.3A Identification and prevention of hearing loss, tinnitus, and vestibular disorders The program provides academic content and clinical education experiences so that each student can learn and demonstrate knowledge and skills in

- the prevention of the onset of loss of auditory system function, loss of vestibular system function, development of tinnitus, and development of communication disorders;
- the use of protocols to minimize the impact of the loss of hearing, tinnitus, loss of vestibular system function, and development of communication disorders;
- the use of screening protocols, including clinically appropriate and culturally sensitive screening measures, to assess individuals who may be at risk for hearing impairment and activity limitation or participation restriction;
- the screening of individuals for speech and language impairments and other factors affecting communication function using clinically appropriate and culturally sensitive screening measures;
- the use of screening tools for functional assessment;
- administering programs designed to reduce the effects of noise exposure, tinnitus, and agents that are toxic to the auditory and vestibular systems;
- applying psychometrics and principles of screening;
- applying the principles of evidence-based practice;
- selection and use of outcomes measures that are valid and reliable indicators of success of prevention programs.

3.1.5A Intervention to minimize the effects of changes in the auditory and vestibular systems on an individual's ability to participate in his or her environment The program's curriculum provides academic content and clinical education experiences so that each student can learn and demonstrate knowledge and skills in order to

- perform assessment for aural (re)habilitation;
- perform assessment for tinnitus intervention;
- perform assessment for vestibular rehabilitation;
- develop and implement treatment plans using appropriate data;
- counsel individuals served, families, and other appropriate individuals regarding prognosis and treatment options;
- develop culturally sensitive and age-appropriate management strategies;
- perform hearing aid, assistive listening device, and sensory aid assessment;
- recommend, dispense, and service prosthetic and assistive devices;
- provide hearing aid, assistive listening device, and sensory aid orientation;
- conduct audiologic (re)habilitation and engage in interprofessional practice to maximize outcomes for individuals served;
- serve as an advocate for individuals served, their families, and other appropriate individuals; August 2017, rev. January 2023 Standards for Accreditation Page 13 of 41
- monitor and summarize treatment progress and outcomes;
- assess efficacy of interventions for auditory, tinnitus, and balance disorders;
- apply the principles of evidence-based practice;
- document treatment procedures and results;
- maintain records in a manner consistent with legal and professional standards;
- communicate results, recommendations, and progress in a culturally sensitive and age appropriate manner to appropriate individual(s);
- select and use outcomes measures that are valid and reliable indicators of success in determining the impact of the interventions used to minimize the effects of changes in structure and function of the auditory and vestibular systems.

ACAE Standards for Au.D. Programs

The primary purpose of the ACAE accreditation is to recognize, reinforce and promote high quality performance in Au.D. educational programs through a rigorous verification process. This process will produce evidence that Au.D. programs have prepared graduates who are qualified to be doctoral-level and independent practicing audiologists. Graduates will be at the point-of-entry to the US and international healthcare systems for the diagnosis and treatment of hearing and balance disorders.

Accreditation also assures communities of interest that graduates will be able to function according to the national scope of practice, as defined by the profession. In the 2016 ACAE Educational Standards, there are added measures and expectations in the scope of practice. New and/or enhanced competency areas found in Standard # 22 include pharmacology, genetics, business/ personnel management/finances, psychosocial impact of hearing impairment and balance disorders, empathy and active listening, self-advocacy skills for patients and families and health and infection control. Programs must now demonstrate how their students have a working knowledge of all competencies as well as the ability to incorporate them into practice.

DIAGNOSIS, MANAGEMENT, AND TREATMENT

The student will be able to:

1. Diagnose, triage, treat and manage auditory and vestibular/balance conditions and diseases for patients over the lifespan, including newborns, infants, children, adolescents, adults, elderly and special needs individuals.
2. Apply audiologic diagnosis, treatment and management principles in diverse settings including, for example, private practice-based, educational and occupational/industrial environments.
3. Apply critical thinking skills to assess the patient's auditory and vestibular status.
4. Prescribe, perform and interpret clinical, laboratory and other diagnostic procedures and tests in consultation with other health professionals as may be required for proper management of the patient.
5. Interpret and synthesize the findings from the patient's history, examination and other diagnostic tests and procedures in order to identify the etiology, the pathogenesis of the condition, and the diagnosis.
6. Formulate a treatment plan and understand the implications of various treatment options.
7. Explain any relevant limitations for diagnosis and treatment and formulate a plan for consultation or referral, as appropriate.

8. Discuss the findings, diagnosis and treatment options with the patient, parent or guardian, family, other health care or service providers, as well as any modifications or consequences that may occur over the course of treatment.
9. Discuss pharmacological treatment options with the patient, parent or guardian, family or other health care or service providers as it relates to the prevention of hearing and balance disorders and, specifically, as it relates to appropriate vestibular system functions.
10. Plan and implement treatment and rehabilitation methods used for the management of auditory and vestibular disorders, including all forms of personal amplification and hearing assistance technology.
11. Present the patient with the sequence of treatment (including preventive care), estimated fees, payment arrangements, time requirements, and the patient's responsibilities for treatment. Apply the informed consent process as it relates to clinical procedures.
12. Characterize and implement evidence based practice methods and a critical evaluation of the literature to provide optimal outcomes for diagnosis and treatment of auditory and vestibular disorders.
13. Integrate all aspects of a patient's life (development, participation, environment and culture), as identified by the International Classification of Functioning (ICF), World Health Organization (WHO) and World Health Assembly, May 2001, into the treatment management of patients with hearing and/or balance disorders (See Explanations).
14. Explain the basic concepts of probability and disease susceptibility, and the influence of genetic factors in the maintenance of health and development of disease, as it applies to patients with hearing and/or balance disorders.

ACAE STANDARDS EVALUATION

The student will be able to:

1. Explain basic cell, organ, and body systems, with special emphasis on the auditory and vestibular/balance systems and their interrelationships to the body as a whole over the lifespan, including newborns, infants, children, adolescents, adults, elderly and individuals with special needs.
2. Describe the development of normal auditory and communication processes, 8 Accreditation Commission for Audiology Education (ACAE) including the embryology and development of the auditory/vestibular, central nervous and related systems.

3. Explain theoretical and applied principles of acoustics, psychoacoustics, non-acoustic stimuli, and electronics as applied to the normal and disordered auditory and vestibular systems.
4. Identify the various localized and systemic processes that lead to dysfunction and disease.
5. Describe the effect that disease processes can have on the body and major organ systems, with special emphasis on the auditory and vestibular systems.
6. Recognize the mechanisms of the various classes of pharmaceutical agents, their interactions, and safe, effective use for the treatment of disease and conditions affecting the ear, the auditory and vestibular systems, central nervous system and related systems.
7. Describe the structures and processes contributing to the development of auditory, vestibular and communication disorders and abnormalities.
8. Explain the impact of hearing disorders on communication for newborns, infants, children, adolescents, adults, elderly and individuals with special needs.
9. Explain and demonstrate the impact of genetics on the development and preservation of auditory function as well as the impact on the development of disorders of the auditory, vestibular, and related systems across the lifespan.
10. Explain the psychological and neurological bases for auditory and vestibular dysfunction and remediation.
11. Describe the science and methods employed, e.g., acoustical and pharmacological, for the preservation of hearing and balance disorders.
12. Critically evaluate the research foundation for hearing, balance and communication sciences.

ACAE STANDARDS CLINICAL EXPERIENCES

Description The goal of clinical experiences is to provide the necessary instruction to assure audiologists can act independently at graduation in any practice environment. This standard addresses the need for a program to assure that the clinical experiences available allow a student to gain the requisite skills and competencies to be able to provide those services at graduation. The program must demonstrate (e.g. measure, document, etc.) that every student has reached this goal. Externships in particular should be chosen with the expectation that a student can achieve independent practitioner status at the end of their program.

Description Standard 23 describes the breadth of clinical experiences that students must have during their training. Programs must describe and demonstrate how the required standards for clinical education are being met at externship sites. Programs must be able to demonstrate that students not only have experience in a diversity of clinical settings and with a diversity of patient populations, but that all of the experiences have a level of quality that allows students to develop skills necessary to provide the full scope of practice.