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Clinical Handbook - Audiology

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INTRODUCTION

Welcome to the Department of Speech, Language, and Hearing Science (SLHS) at the University of Colorado at Boulder (CU).

The Doctor of Audiology (AuD) degree program at CU is designed to prepare audiologists for autonomous clinical practice encompassing the entire scope of practice of audiology. The clinical doctorate model at CU stresses the integration of academic classroom learning and practical experience across a broad spectrum of clinical specialties and practice environments. Our AuD curriculum provides a strong foundation in the scientific knowledge base and a wide range of clinical field experiences that prepares AuD graduates with the tools necessary for evidence-based clinical practice. The CU AuD curriculum also is designed to enable AuD students to meet current standards required for ASHA certification in audiology as well as Colorado state licensure standards.

The purpose of this handbook is to provide AuD students with the basic information needed regarding the clinical aspect of the program throughout their course of study and to assist students in navigating their way through the graduate degree program and certification process. This handbook is not meant to be an exhaustive collection of all policies at the University of Colorado - Boulder. Students also should review the CU Graduate School website (<u>http://www.colorado.edu/graduateschool/</u>), which is the final source regarding University policies on graduate programs. Some of the information provided in the handbook also is available on the department's AuD website (<u>www.colorado.edu/slhs</u>). If additional questions and/or concerns arise that are not formally addressed in these sources, your advisor will be a valuable asset as you progress through the program. You are urged to maintain close contact with your advisor and to seek additional information as the need arises. Academic and clinical faculty members also are available for advice, guidance, and consultation regarding all academic and clinical requirements, policies, and procedures. It is however, the responsibility of AuD students to be informed about all academic and clinical requirements of the AuD program at CU.

Department of Speech, Language & Hearing Sciences

Mission

The Department of Speech, Language & Hearing Sciences at the University of Colorado-Boulder is dedicated to the pursuit of excellence in education, research and scholarship in the science and practice of human communication in order to benefit individuals and families in the local community, the state of Colorado and the world.

Currently, the Department of Speech, Language and Hearing Sciences has an enrollment of about 300 undergraduate majors, over 100 graduate students, 9 tenure-track faculty, 10 clinical faculty, over 25 adjunct faculty and more than 30 community professionals who participate in various aspects of our academic and/or clinical training programs. The Department offers a broad academic curriculum, comprehensive clinical experiences, and active research programs in a variety of areas. For detailed information regarding SLHS faculty and staff, please visit SLHS's website: https://www.colorado.edu/slhs/meet-us

AuD Program

CU's AuD program is accredited by the Council on Academic Accreditation (CAA) through June 30, 2022. Accreditation ensures our program meets required standards for core knowledge and skills required for entry into the profession of audiology. To maintain accreditation, our program must submit an annual report outlining how we meet accreditation standards. Re-accreditation occurs every 7 years and requires a site visit by a team of volunteers who represent CAA to do an in-depth review to confirm our program continues to meet accreditation standards.

Concerns about our program can be reported to:

Council on Academic Accreditation 2200 Research Boulevard #310 Rockville, MD 20850 (800) 498-2071 or (301) 296-5700

Description of Facility & Services

Graduate students in Department of Speech, Language and Hearing Science (SLHS) provide clinical services under direct supervision of ASHA-certified clinical faculty members.

THE SPEECH, LANGUAGE, & HEARING CLINIC at CU Boulder

The Department of Speech and Hearing Science houses the Speech Language and Hearing Clinic (SLHC), which provides campus-based clinical training for our SLP and AuD programs. Through this clinic, diagnostic and rehabilitative speech language pathology services, auditory processing assessment, and nursing home hearing aid check visits are provided through the SLHC to the general public on a fee-for-service basis.

Sound booths and audiometric equipment located on the first floor of the SLHS building are for use in faculty research. The sound booth for student learning and practice as well as student research (capstone) is located on the 3rd floor.

The SLHC's Policy and Procedure manual can be found on your practicum's Canvas page.

UNIVERSITY OF COLORADO HEALTH – BOULDER HEALTH CENTER

AuD students begin their on-site clinical experience at the University of Colorado Health – Boulder Health Center. The Hearing and Balance Center at University of Colorado Health provides clinical services, resources, education, and research to support the needs of individuals in metro Denver who are deaf and hard of hearing.

The center, which is a partnership between University of Colorado Health and the University of Colorado School of Medicine, provides resources, education, and research to support the needs of individuals who are deaf and hard of hearing, their families, the community and hearing health professionals.

The Center values individual and family rights in communication and technology choices, and strives to optimize the quality of life for all it serves.

The Hearing and Balance Center is recognized worldwide for its unique leadership and progressive innovations in the realm of hearing and deafness.

The UCHealth – Boulder Health Center is located at:

5495 Arapahoe Avenue, Boulder, CO 80303

Parking spaces closest to the clinic itself are reserved for patients. Student clinicians and clinic staff are asked to park in the spaces further away from the building.

The phone number to the audiology work area at the Center is 303-544-3665. Given the fact that audiologists are most often working with patients, it is very likely that when you call this number, you will reach voicemail. Therefore, be sure to inquire with your preceptor (and refer to your course syllabus) as to his/her preferred contact method.

Other Clinical Facilities

AuD students will engage in clinical activities at other facilities in the Denver/Boulder area as they progress through the program. Visits to these other sites begins as early as during the 2nd year of the program (note that observations may take place at some sites during the 1st year).

Examples of other facilities at which students attain clinical experience:

- University of Colorado Hospital Hearing & Balance Center Aurora
- Marion Downs Center Denver
- Denver Health Denver
- Children's Hospital Colorado Aurora (and other sites)
- Rocky Mountain Ear Center Englewood
- Denver VA Hospital Aurora
- Boulder Valley Hearing Center Boulder
- Longmont Clinic Longmont
- Cochlear Corporation Centennial
- Various School Districts Boulder County, Jefferson County, Douglas County, Cherry Creek, Aurora Public Schools, Adams County, St Vrain Valley, etc.

<u>Policy/Procedure</u> - Students must adhere to all policies and procedures of the site to which they are assigned/visiting. These policies may include: HIPAA, confidentiality, Infection Control/Standard Precautions, background checks, drug screening, etc. Note that the drug screening required by many facilities includes marijuana; regardless of the fact that marijuana is legal in Colorado, its use is not acceptable for many clinical entities.

<u>Transportation</u> - While some sites are accessible by RTD bus, many of these sites will require a student to have his/her own transportation. It is the student's responsibility to ensure that he/she understands where the facility is as well as whether parking is available. The student must discuss these things with preceptors/instructors prior to his/her first day at the site.

Facilities

Administrative office

The Speech, Language, & Hearing Center's administrative assistant handles issues related to the provision of clinical services in the SLHC such as scheduling and billing. This office is located on the first floor of the SLHS building near the SLHC waiting room.

Mailboxes

Faculty/staff and AuD student mailboxes are located on the 2nd floor of the SLHS building near the elevator. All graduate students are assigned mailboxes at the beginning of each semester. Be sure to check your mailbox regularly since important messages may be left for you which require prompt attention. Use discretion when leaving items of value in your mailbox.

Waiting Room

Note that clinical discussions should not take place in a patient waiting room. If important information needs to be exchanged with patients/parents, it should be discussed in the privacy of an exam room or test suite.

Confidentiality

Patient reports/notes that are done using a method other than the electronic health record system are to be de-identified appropriately per HIPAA regulations (see Appendix A for more information on HIPAA). Do **not** save patient reports or other patient information on your personal computer or flash drive. Any reports or other material printed with patient identifying information <u>must</u> be shredded. Discard of these materials in the appropriate bin (this bin is clearly identified). If you do not know where this bin is, ask your preceptor.

Infection Control

Standard Precautions should be used any time you work with a patient. Infection Control guidelines can be found in Appendix B. The guidelines provided in this handbook reflect those that are in use at University of Colorado Hospital and its clinics. Note that other sites' guidelines may differ slightly. It is the responsibility of the student to inquire with preceptors regarding the site's infection control policies.

Maintenance of Audiologic Equipment/Space in SLHS

It is the responsibility of all individuals who use the audiology space and equipment in SLHS to leave the areas in clean and neat condition and to replace all equipment in the proper location following test procedures. All speculum and immittance probe tips should be cleaned and returned for re-use. The ultra-sonic cleaner is available for this purpose (instructions for use are in the teaching booth). All otoscopes should be re-charged when they are no longer working. All

equipment should be turned off after use and all rooms should be locked in order to maintain security.

No food or drinks are allowed in the suites or labs.

Malfunctioning Equipment

If a piece of equipment is not working properly, the student clinician should first troubleshoot the problem in attempt to correct it. If the problem cannot be fixed, identify, as clearly as possible, what the problem seems to be. This information should be submitted to the Director of Audiology Clinical Education who will respond to the request for equipment repair. A note should also be left on the equipment, indicating the problem and the date.

Logbook

First year AuD students are assigned a month in which they are responsible for ensuring the audiology teaching booth space and equipment are in good working order and clean. The students assigned each month will document in the logbook (kept in Booth) which tasks were finished when as well as note any problems and/or supplies that are low.

Professionalism for Clinical Practice

Professional behavior is expected of all graduate student clinicians. The following outline provides information as to what professional behavior entails. Please note that this list is not intended to be exhaustive. Note that particular sites may have specific requests regarding particular aspects of professionalism above and beyond this outline.

Ethical Practices

• Conducts all clinical work in accordance with the Code of Ethics set forth by the American Speech-Language-Hearing Association. (See Appendix D)

Dependability

- Prepares for and conducts clinical services as assigned (reviews appropriate files, develops questions and/or key points for discussion).
- Prepares for and conducts meetings/conferences/consultations (reviews appropriate files, develops questions and/or key points for discussion).
- Carries out all duties to accomplish total case management (e.g., forms, phone calls, referrals, etc.).
- Makes appropriate arrangements and notifies all concerned regarding any schedule change or cancellation.

Punctuality

- In case of student clinician illness, accepts responsibility to:
 (a) Notify clinical preceptor as early as possible
 (b) Discuss arrangements for make-up time with clinical preceptor.
- Never leaves the clinic without notifying/checking with clinical preceptor first.
- Requests approval for absence from clinic in writing from Coordinator of Clinical Audiology Education (if student clinician is in an on-site rotation) or his/her preceptor (if student clinician is at an off-site rotation) well in advance of any anticipated absences from professional responsibilities.
- Submits all written assignments (e.g., test results, reports, letters, etc.) in acceptable form (appropriate grammatical usage, paragraph structure, punctuation, and spelling) by scheduled deadlines.

• Attends all meetings/conferences/consultations on time.

Confidentiality

- Abides by HIPAA regulations. The Health Insurance Portability and Accountability Act (HIPAA) was designed to ensure the privacy and security of patient information and give patients greater rights related to their information. (See Appendix A for more information regarding HIPAA.)
- Utilizes discretion concerning patient information in written and oral communication with others.
- Accesses patient information on an "as needed" basis only.

Personal Appearance

- Wears name badge to provide patients, family members, and others with a means of easily identifying graduate students.
- Maintains and promotes a positive professional image.
- Does not wear scented products (i.e., perfume, hair products, body lotions, etc.).
- Maintains proper personal hygiene.
- All attire must appear neat, pressed and professional looking
- No denim jeans or shorts are allowed. Pants must not be excessively baggy or ride excessively low on the hips
- Skirts must cover the knee and be loose enough to allow for movement.
- Any pants/skirt/shirt combination must cover the midriff when the arms are raised and also cover the back when bending over.
- Shirts for men should have collars and be tucked in.
- Low-cut tops and shirts that show through are not allowed.
- Shoes should look professional and be closed in the front. Open back shoes such as mules are acceptable. No flip-flops or athletic shoes are allowed.
- Unusual hair coloring (e.g. pink, blue, green etc.) and style (e.g. Mohawk) are not commonly allowed.

- Visible or potentially visible body art should be removed or covered. Oral or facial piercings (tongue, lip, and eyebrow) must be removed. Tattoos must be covered with long sleeves or a high collar.
- Any student who is not dressed appropriately will not be allowed to participate in clinic.

Communication

- Utilizes appropriate communication in all professional activities.
- Provides appropriate communication model for patients and families.
- Uses appropriate written and oral communication with all persons involved in the case including clinical preceptor, co-clinicians, and other professionals.
- Checks email regularly and promptly replies to clinical preceptor emails/phone calls. (Note: Email is the official mode of communication within CU-Boulder (<u>http://www.colorado.edu/policies/student-e-mail-policy</u>))

Accountability

- Keeps documentation (test results, data on specific goals, correspondence, release of information, hearing aid status etc.) up-to-date and filed in appropriate location, if applicable.
- Fills out appropriate chart notes/paperwork in a timely manner.
- Ensures that evidence-based protocols are used each semester enrolled in SLHS 5918/SLHS 5928 (e.g., those that are created as part of coursework).

Failure to meet the standards of professionalism outlined above and in the Technical Standards document signed by all students prior to their start in the program may result in probationary status to be determined by the AuD faculty. The result may also be lowering of the semester clinical grade and/or termination of clinical responsibilities.

Clinical Training Requirements

The Department of Speech and Hearing Science at University of Colorado (CU) has developed a clinical training program for AuD students. Clinical rotations/externships enable students preparing for a career as an audiologist to obtain training at on-campus and off-campus sites.

The AuD clinical training program at CU has been designed such that upon completion, students will have met all the clinical requirements for Colorado state licensure and national certification as an audiologist. In addition, students will have met the standard of excellence that we set for all graduates from our professional training program. In meeting our standards for quality clinical services, it is important for students to understand that they will gain more than the minimum experiences required for certification because we are preparing students to assume the roles and functions of an audiologist across a variety of different settings and service delivery models. This training model is designed to maximize students' employment opportunities upon entry into the professional job market. Clinical placements will result in the accumulation of approximately 2000 hours of clinical experience in different clinical settings and with different populations in order to obtain and demonstrate skills across the scope of practice in audiology, a student must demonstrate knowledge and skills outlined in Standard II of the 2020 Certification Standards (See Appendix E) while engaged in supervised clinical practicum experiences.

The clinical component of the AuD program stresses the importance of students first gaining exposure, then supervised experience, and eventually independent service provision as they progress through a series of diverse and challenging campus-based and off-campus clinical placements at a variety of facilities. Clinical placements are selected to provide students with experience in audiological service provision across the life span, diverse populations, and entire scope of practice in audiology from diagnostic services through rehabilitative management of hearing-impaired children and adults. Acceptable clinical rotation experience includes clinical and administrative activities directly related to patient care.

Required Clinical Training

The clinical training program is structured around the concept of completing core clinical placement requirements and adding areas of emphasis desired by the student. The clinical rotations are sequenced to evolve in scope and complexity. All AuD students are required to complete a total of 32 clinical credits including two semesters of clinic preparation and observation, three on-campus and three off-campus clinical rotation placements, and the 4th-year Audiology Externship, which is the culmination of the AuD program. By definition, a clinical rotation refers to short-term clinical training within or outside the University and an externship refers to long-term clinical training outside the university. Rotations selected are based on a combination of the student's clinical interest and the fulfillment of their ASHA competency and state licensure requirements.

General Guidelines

Student participation in clinical practicum should be considered a privilege rather than a right. Clinical practicum participation is different in many ways from class and laboratory assignments. It involves the welfare of the patients in our clinics as well as the training needs of students. We are ethically bound to protect the welfare of the patients in our clinics, so special policies apply to these educational opportunities. Admission to graduate study in audiology in the Department of Speech, Language, and Hearing Sciences at University of Colorado - Boulder does not guarantee participation in clinical practicum. All AuD students must demonstrate competency in basic audiological procedures prior to enrolling in SLHS 5928 by passing an initial Practical Exam that takes place during the 1st year of the AuD program.

Requirements for the ASHA Certificate of Clinical Competence in Audiology (CCC-A) include the completion of supervised clinical practicum by audiologists who hold the Certificate of Clinical Competence in Audiology. CU graduation requirements include the completion of three semesters (summer, fall and spring) in the fourth year even if excess hours are accrued during this time. It is the intent to distribute clinical hours across the 4-year AuD program in settings that provide a breadth of clinical experiences. These experiences may include basic and advanced auditory and vestibular system assessment, hearing amplification, cochlear implants and other implantable devices, pediatric and adult aural rehabilitation, hearing conservation, educational audiology, sedated assessments and intra-operative monitoring using evoked electrophysiological measures, and business practices in audiology.

Progression of Clinical Assignments

First-year AuD students observe/assist in the audiology clinic and attend clinical laboratory experiences (SLHS 5918) designed to prepare students for their first clinical on-campus rotation. This experience culminates in the Practical Examination.

Beginning in the 2nd year of the AuD program, students spend three semesters in universitybased clinical rotations at University of Colorado Health – Boulder Health Center while also obtaining experiences in the community through nursing home visits and hearing screenings (SLHS 5928). During the 3rd year, students continue their training in approved off-campus clinical rotation placements throughout the Denver Front Range area (SLHS 5938/SLHS 5948). Off-campus clinical rotation sites are chosen to match: (a) program goals, (b) level of student preparation, and (c) student interest(s). Participating clinical sites are selected based on their commitment to the: (a) education of AuD students, (b) certification/licensure status of clinical preceptors, (c) quality of facilities and equipment, and (d) variety of broad-based clinical experiences and diverse clinical populations offered.

The culmination of the clinical portion of the program is the Audiology Externship (SLHS 6938/ SLHS 6948), which involves full-time placement in approved regional or national facilities.

On- and off-campus clinical rotation assignments are designed to fulfill ASHA certification requirements and provide the student with a variety of clinical experiences in preparation for externship placement and a professional career. Students who have been scheduled to provide clinical services are obligated to fulfill each of their clinic responsibilities throughout the semester. Because of our commitment to the clients and facilities, there are no provisions for a student to withdraw from a clinical rotation unless clinical performance is unsatisfactory or it is in the best interest of the client(s) for the student to be assigned to a different preceptor. Additional factors for withdrawal may be considered by the clinical supervisor/preceptor in consultation with the department's AuD Committee Chair and the Director of Audiology Clinical Education.

Students are free to indicate clinical rotation preferences, and when possible, these preferences will be accommodated. It is important to note, however, that the primary obligation of the

program is to provide a well-rounded clinical training experience that meets the quality standards of the department and clinic. To maintain the high quality of the training program, students can be assigned to a clinical rotation placement that was not necessarily their first choice but necessary to meet the goals of the training program and ASHA certification and state licensure requirements. Clinical rotation assignments are requested in the semester prior to the desired registration through the Director of Audiology Clinical Education. Each approved site must have a formal affiliation agreement filed with University of Colorado prior to the placement of audiology students. Affiliation agreements are the responsibility of the Director of Audiology Clinical Education and Director of Clinical Operations.

Titles

Students will introduce themselves to patients with their first and last name and state that they are a graduate student in audiology. They will also introduce their clinical instructor by their full name or as Ms._____ or Dr._____ and state they are the 'supervising audiologist'. Off-campus students in placements will use "Audiology Extern" or other title as preferred by their clinical preceptor.

Clinical Time Demands

Enrollment in clinical practicum places significant time demands on students during the work week. Student clinicians registered for clinical practica should be prepared to devote approximately 5 to 10 hours per week to the preparation, implementation, and analysis of clinical experiences *in addition* to the actual time spent in the clinic working with clients. In a typical 15-week semester, students registering for two credits of SLHS 5928 are typically engaged in clinical activity one day per week and are responsible for the service delivery and reports/chart notes for anywhere from three to thirty patients! Students registering for three credits of SLHS 5938/5948 are typically in clinic for at two to three full days per week at an offsite placement and are responsible for service delivery and reports/chart notes as directed by the offsite preceptor. SLHS 6938/6948 is a full-time externship.

Attendance Policy

Consistent attendance in clinic is required to gain appropriate clinical skills and make adequate progress each semester. All students are therefore expected to attend each scheduled clinical session during a semester. Illness or funeral attendance are the only reasons considered acceptable for missing clinic. A doctor's note may be required if you miss significant time in clinic.

If you anticipate that you will miss clinic in order to attend a conference, you are **required** to obtain **written approval** from your clinical preceptor(s) **at the beginning of the semester**. **Do not make your travel plans before you obtain approval from your clinical preceptor(s).** Missing clinic for conference attendance does not necessarily relieve you of clinical hours missed. Be sure to offer your preceptor times/days to make up for time missed.

<u>Tardiness</u>: Students are expected to be **on time** and ready for their scheduled clinical experiences. Tardiness is unacceptable except in cases beyond the graduate student clinician's control (e.g., traffic accident, inclement weather). The student should do his/her best to contact his/her clinical preceptor to let him/her know the student is running late.

Documentation of Clinical Hours and Competencies

Tracking Progress

An online database program (Calipso) has been adopted to help track student progress in the AuD program. Additional tracking documents have been developed to assist the student and the academic advisor(s) in systematically tracking and monitoring the satisfactory completion of academic coursework, clinical practicum, and progress toward the attainment of the knowledge and skills required in the ASHA Standards. According to the ASHA guidelines, applicants for certification should maintain documentation of academic coursework, practicum hours, and practicum supervision verified by the program. This documentation must demonstrate that the applicant possesses the knowledge and skills delineated in Standard II. Documentation must be made available (to ASHA) upon request. By keeping current and accurate advising check sheets, AuD graduate students and advisors know precisely which courses and competencies are needed to complete degree and certification requirements. Please also refer to https://www.asha.org/Certification/2020-Audiology-Certification-Standards/ for the most current version of the 2020 Standards and Implementation Procedures for the Certificate of Clinical Competence in Audiology (see also Appendix E).

The Doctor of Audiology course schedule (Appendix G) lists all required courses and clinical practica for the AuD degree. All AuD graduate courses are offered on a once-a-year or every-other-year basis. As a result, any failure to complete a required graduate course during the appropriate semester of enrollment will likely delay graduation. Information regarding the completion of various knowledge/skill competencies in the ASHA certification standards will be addressed on the syllabi of courses.

Clock hours

Students who are enrolled in practicum and seeing patients in the clinic are required to log the amount of time spent participating in each session including preparation, report writing etc. Each student is required to keep track of his/her clock hours each semester including off-campus sites and in the fourth year. All clock hours need to be logged into Calipso and signed off on by the clinical preceptor. Students should also track clock hours via paper/electronic log each day as backup and keep a copy of these logs while they are in the program. This information is necessary for graduation as well as ASHA certification. It is the student's responsibility to maintain accurate records.

Upon graduation, should a student wish to obtain his/her Certificate of Clinical Competence from ASHA, the application form for the Certificate of Clinical Competence must be completed online (at <u>www.asha.org</u>) by the graduate. Once submitted, a verification document is sent to the Director of Audiology Clinical Education who will attest that the graduate has indeed met the Standards for the Certificate of Clinical Competence. Note that the entire process of obtaining the CCC from ASHA can take up to 6-8 weeks, so plan accordingly.

Clinical Rotation Credits

AuD students need to complete a minimum of 32 clinical credits to graduate. Clinical experiences are distributed across eleven semesters. An example of how the clinical experiences progress through the program is shown below:

1st year –

- Fall observe at UCH Boulder clinic, clinical labs (SLHS 5918 1 credit)
- Spring observe/assist at UCH Boulder clinic, clinical labs (SLHS 5918 1 credit)

2nd year –

- Summer UCH Boulder clinic, various specialty opportunities (~8 hours/wk) (SLHS 5928 – 1 credit)
- Fall UCH Boulder clinic, various specialty opportunities (~8-12 hours/wk) (SLHS 5928 2 credits)
- Spring UCH Boulder clinic, various specialty opportunities (~8-12 hours/wk) (SLHS 5928 2 credits)

3rd year -

- Summer off site 3x/week (24+ hours/week) (SLHS 5938 4 credits)
- Fall off site 2x/week (16+ hours/wk) (SLHS 5938/5948 4 credits)
- Spring off site 2x/week (16+ hours/wk) (SLHS 5938/5948 4 credits)

4th year -

• Externship (12 months) (SLHS 6938/6948 - 13 credits total)

Compliance requirements

Students are required to complete training in Universal Precautions and HIPAA annually (trainings for both are offered through CU). CPR BLS training is required; proof of up-to-date CPR training must be provided to the SLHC Administrative Assistant (certification is typically good for two years). Students are also required to provide documentation of immunizations and complete a criminal background check (this is typically done at the onset of the AuD program). These documents should be turned into the SLHC Administrative Assistant and uploaded to Calipso.

Liability Insurance

Liability Insurance needs to be obtained by the beginning of the fall semester, prior to any practicum experience beginning at the commencement of the AuD program. Liability insurance policies are typically valid for one full year. Proof of liability insurance needs to be submitted to the SLHC Administrative Assistant each fall and uploaded to Calipso. Liability insurance is available through ASHA or AAA. Failure to possess up-to-date liability insurance will result in inability of the student to take part in clinical activities.

Evaluation of Clinical Practicum

Practical Exams

Clinical practical exams are conducted during the 1st year of the program. The practical exam typically consists of the following components:

- Earmold impression
- Electroacoustic evaluation of hearing aid and interpretation of results
- Programming of hearing aid
- Real Ear assessment
- Case history
- Immittance testing
- Basic audiometric test battery
 - Pure tone air and bone conduction
 - o Speech audiometry
 - o Masking as needed
- Interpretation of test results
- Counseling patient regarding evaluation results

Students should be prepared to answer clinical questions relative to the component being assessed. Each component of the practical exam must be passed in order for the student to move on to SLHS 5928.

Practicum

Student clinicians will be assigned to one or more clinical preceptors during each semester of practicum. According to requirements for ASHA certification, the amount of supervision will be dependent upon student clinician skill levels and needs.

Students are strongly encouraged to schedule a time to meet with his/her clinical preceptor at the beginning of each semester and as needed throughout the semester. These meetings can be used to reflect and evaluate clinical performance, discuss areas of strengths and weaknesses, discuss proposed plans and goals, or communicate upcoming responsibilities.

Evaluation and Remediation Procedures for Audiology Clinical Practicum

Students will receive written and verbal feedback from their clinical preceptors during each semester. Students are encouraged to discuss individual learning styles with their clinical preceptors to facilitate clinical learning. A formal evaluation will be completed by preceptors using Calipso at midterm and the final of the semester.

At the midterm and final evaluations the student and preceptor meet to discuss the semester and the completed evaluation form. This is a mechanism for the student and the clinical preceptor to identify areas of strength, as well as areas needing improvement and possibly remediation.

Failure of a student clinician to demonstrate expected levels of performance in any area of clinical or professional skills will be recorded on the evaluation. The Director of Audiology

Clinical Education and the clinical preceptor for that practicum assignment will discuss specific recommendations for those areas that are not at expected performance levels; these recommendations will be incorporated into a remediation plan.

Remediation procedures for clinical and professional competencies will result when the student fails to demonstrate clinical knowledge and/or skills at the level expected given the student's level in the program. Guidelines regarding remediation and probation for below satisfactory performance are outlined in the SLHS Graduate Handbook, available on the SLHS website (www.colorado.edu/slhs).

Lines of Communication

We hope that students will be able to discuss most concerns directly with the involved parties but know that situations can arise in which other advice is needed. Audiology faculty, the SLHS department chair, and the graduate program director are all available to discuss student concerns. Please see the SLHS Graduate Handbook for the grievance policy.

Certification and Licensure

At the successful completion of the AuD program, students are eligible to apply for ASHA certification (CCC-A). The Praxis II exam in Audiology (code: 5342) is required for ASHA certification. Information about the exam is available at http://www.asha.org/students/praxis/. The Praxis II exam is administered by the Educational Testing Service. The website is www.ets.org/praxis. The address is:

ETS – Praxis Series P.O. Box 6052 Princeton, NJ 08541-6052 Phone number: 800-772-9476

It is recommended that students register for and take this exam at the end of Year III after completion of all coursework, but prior to the end of the Fall semester of the 4th year externship. The Praxis II exam scores should be reported directly to the SLHS Department. It is strongly recommended that students keep a copy of their results for their records after completing the exam. Students can identify specific recipients to receive a copy of their Praxis score when they register to take the exam. Codes for various recipients are:

- For SLHS, 0037 (**Be sure to list this code so that our department receives a copy of your results!)
- For CU Boulder School of Education, 4841 (if you think you may want to go into Educational Audiology in Colorado after graduation, include this code!)
- For ASHA, 5031 (if you think you will apply for your Certificate of Clinical Competence after graduation, include this code!)
- For Colorado Dept of Education, 7040 (if you send only to CU School of Ed, CDE will get results too)
- For Colorado Department of Regulatory Agencies, 8544

Graduates can apply for certification online at http://www.asha.org. Contact the ASHA Action Center at 800-498-2071 for assistance/questions.

Certification is also available through the American Board of Audiology (ABA). Information about ABA certification can be found at https://www.boardofaudiology.org/board-certified-in-audiology/documents/HandbookApril2019Final_001.pdf. Board Certification in Audiology requires a minimum of 2000 hours of direct patient care supervised by a licensed audiologist. All hours must be obtained AFTER coursework is completed (externship hours can count towards 2000 required hours). See ABA handbook and website for more information.

State licensure/registration is required in most states to practice Audiology, and the requirements vary by state. Colorado state licensure requirement information, instructions and application forms are available at http://cdn.colorado.gov/cs/Satellite/DORA-Reg/CBON/DORA/1251632508562. Check individual state requirements if you are applying for jobs elsewhere.

Appendix A: The Health Insurance Portability and Accountability Act (HIPAA)

HIPAA and Privacy (from University of Colorado Hospital)

The Health Insurance Portability and Accountability Act (HIPAA) was designed to ensure the privacy and security of patient information and give patients greater rights related to their information.

Patient information is referred to as Protected Health Information (PHI).

- Privacy covers all forms of information maintained or disclosed, including paper, electronic and oral.
- Security refers to electronic PHI only. We are required to control access and protect information from accidental or intentional disclosure to unauthorized persons and to protect it from alteration, destruction or loss

Your responsibilities related to privacy and security.

- Only share information with those that have a "need to know" the information in order to perform their job duties.
- Share only the minimum amount of information required. For example, distributing a report with patient identifying information on it, such as name or medical record #, when those receiving the report did not need to know the information.
 - This does not apply to information needed to treat the patient.
 - Remember that any information, not just name or medical record number can be used to identify a patient. This could include things like a unique injury or occupation. Even if there is no name or medical record number information must be protected if it can be used to identify patients.
 - Refer requests for copies of patient information to Health Information Management. Trained staff will track and release the information. Exceptions may be made if a referring physician requires information in order to treat the patient.
 - Keep your passwords secure. If you believe someone might have learned your password contact the help desk immediately so your password can deactivated and reissued. You are responsible for all accesses under your password.
 - Keep patient information secure. When unattended, lock it up. If information is shared with or learned by someone without a need to know the information it is a disclosure that must be tracked and is a potential violation.
 - Discuss patient information, when possible, in private areas. If a private area is not available speak in a low to moderate voice to prevent the information from being overheard.

- Ask patients, preferably in private, before sharing their information in front of someone.
- Do not review patient information, including demographic information, unless you have a need to do so in order to perform your job duties.
- Do not store patient information on a mobile device unless it is encrypted.
- Dispose of all paper in confidential trash bins so that it is properly destroyed.
- Report any suspected violations to your manager or director, the privacy officer or the Compliance Hotline, 877-454-6344. Reports can be anonymous and the organization is prohibited from retaliating for reports that are believed to be privacy or security violations.
 - Unfounded, malicious reports, however, may subject you to disciplinary action.
 - Failure to report suspected violations can result in disciplinary action.

Sanctions for failure to follow privacy and security regulations:

- The organization will enforce disciplinary action up to and including termination.
- Health and Human Services/Office for Civil Rights can levy fines (\$100 \$1.5 million) on the individual as well as the organization for violations. In addition, criminal penalties, including up to 10 years in jail can be assessed.

Appendix B: Infection Control: Standard Precautions in Health Care (adapted from WHO 2007)

Background

Standard precautions are meant to reduce the risk of transmission of bloodborne and other pathogens from both recognized and unrecognized sources. They are the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients.

Hand hygiene is a major component of standard precautions and one of the most effective methods to prevent transmission of pathogens associated with health care. In addition to hand hygiene, the use of **personal protective equipment** should be guided by **risk assessment** and the extent of contact anticipated with blood and body fluids, or pathogens.

In addition to practices carried out by health workers when providing care, all individuals (including patients and visitors) should comply with infection control practices in health-care settings. The control of spread of pathogens from the source is key to avoid trans-mission. Among source control measures, **respiratory hygiene/cough etiquette**, developed during the severe acute respiratory syndrome (SARS) outbreak, is now considered as part of standard precautions.

Worldwide escalation of the use of standard precautions would reduce unnecessary risks associated with health care. Promotion of an **institutional safety climate** helps to improve conformity with recommended measures and thus subsequent risk reduction. Provision of adequate staff and supplies, together with leadership and education of health workers, patients, and visitors, is critical for an enhanced safety climate in health-care settings.

Important advice

- Promotion of a safety climate is a cornerstone of prevention of transmission of pathogens in health care.
- Standard precautions should be the minimum level of precautions used when providing care for all patients.
- Risk assessment is critical. Assess all health-care activities to determine the personal protection that is indicated.
- Implement source control measures for all persons with respiratory symptoms through promotion of respiratory hygiene and cough etiquette.

Hand hygiene

- Perform hand hygiene by means of hand rubbing or hand washing (see detailed indications in table).
- Perform hand washing with soap and water if hands are visibly soiled, or exposure to spore-forming organisms is proven or strongly suspected, or after using the restroom. Otherwise, if resources permit, perform hand rubbing with an alcohol-based preparation.
- Ensure availability of hand-washing facilities with clean running water.
- Ensure availability of hand hygiene products (clean water, soap, single use clean towels, alcohol-based hand rub). Alcohol-based hand rubs are available at the point of care.

Personal protective equipment (PPE)

- ASSESS THE RISK of exposure to body substances or contaminated surfaces BEFORE any health-care activity. **Make this a routine!**
- Select PPE based on the assessment of risk:
 - o clean non-sterile gloves
 - o clean, non-sterile fluid-resistant gown
 - o mask and eye protection or a face shield.

Respiratory hygiene and cough etiquette

- Cover the mouth and nose when coughing or sneezing.
- Hand hygiene after contact with respiratory secretions.
- Spatial separation of persons with acute febrile respiratory symptoms.

Health-care facility recommendations for standard precautions: key elements at a glance

1. Hand hygiene

Summary technique:

- Wash hands whenever they are visibly soiled. <u>Hand washing</u> (40–60 sec): wet hands and apply soap; rub all surfaces; rinse hands and dry thoroughly with a single use towel; use towel to turn off faucet.
- Rub hands for hand hygiene, but wash them when they are visibly soiled! <u>Hand rubbing</u> (20–30 sec): apply enough product to cover all areas of the hands; rub hands until dry.

Summary indications:

- Before and after any direct patient contact and between patients, whether or not gloves are worn.
- Immediately after gloves are removed.
- Before handling an invasive device.
- After touching blood, body fluids, secretions, excretions, non-intact skin, and contaminated items, even if gloves are worn.
- During patient care, when moving from a contaminated to a clean body site of the patient.
- After contact with inanimate objects in the immediate vicinity of the patient.

2. Gloves

- Wear when touching blood, body fluids, secretions, excretions, mucous membranes, nonintact skin.
- Change between tasks and procedures on the same patient after contact with potentially infectious material.
- Remove after use, before touching non-contaminated items and surfaces, and before going to another patient. Perform hand hygiene immediately after removal.

3. Facial protection (eyes, nose, and mouth)

• Wear (1) a surgical or procedure mask and eye protection (eye visor, goggles) or (2) a face shield to protect mucous membranes of the eyes, nose, and mouth during activities

that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

4. Gown

- Wear to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- Remove soiled gown as soon as possible, and perform hand hygiene.

5. Prevention of needle stick and injuries from other sharp instruments2

Use care when:

- Handling needles, scalpels, and other sharp instruments or devices.
- Cleaning used instruments.
- Disposing of used needles and other sharp instruments.

6. Respiratory hygiene and cough etiquette

Persons with respiratory symptoms should apply source control measures:

• Cover their nose and mouth when coughing/sneezing with tissue or mask, dispose of used tissues and masks, and perform hand hygiene after contact with respiratory secretions.

Health-care facilities should:

- Place acute febrile respiratory symptomatic patients at least 1 metre (3 feet) away from others in common waiting areas, if possible.
- Post visual alerts at the entrance to health-care facilities instructing persons with respiratory symptoms to practise respiratory hygiene/cough etiquette.
- Consider making hand hygiene resources, tissues and masks available in common areas and areas used for the evaluation of patients with respiratory illnesses.

7. Environmental cleaning

• Use adequate procedures for the routine cleaning and disinfection of environmental and other frequently touched surfaces.

8. Linens

Handle, transport, and process used linen in a manner which:

- Prevents skin and mucous membrane exposures and contamination of clothing.
- Avoids transfer of pathogens to other patients and or the environment.

9. Waste disposal

- Ensure safe waste management.
- Treat waste contaminated with blood, body fluids, secretions and excretions as clinical waste, in accordance with local regulations.
- Human tissues and laboratory waste that is directly associated with specimen processing should also be treated as clinical waste.
- Discard single use items properly.

10. Patient care equipment

- Handle equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of pathogens to other patients or the environment.
- Clean, disinfect, and reprocess reusable equipment appropriately before use with another patient.

1 For more details, see: WHO Guidelines on Hand Hygiene in Health Care (Advanced draft), at:

http://www.who.int/patientsafety/information_centre/ghhad_downlo ad/en/index.html.

2 The SIGN Alliance at:

http://www.who.int/injection_safety/sign/en/

University of Colorado Hospital - Hand Hygiene Policy

Policy

Hand antisepsis is the single most effective modality for preventing the spread of infection. Many recent studies have shown that alcohol-based waterless antiseptic agents are significantly more effective in reducing the microbial load on hands than washing with soap and water. Other studies have demonstrated that inclusion of emollients and lotions in these waterless antiseptic agents may actually be more effective in maintaining skin integrity than repeated use of soap and water. Therefore, the Center for Disease Control and Prevention has recommended that the use of waterless antiseptic agents for hand hygiene in the health care setting is "highly preferable" to the use of antimicrobial soap and water when the hands are <u>not</u> visibly soiled.

I. Indications for hand antisepsis

If hands are not visibly soiled, use an alcohol-based waterless antiseptic agent for routinely decontaminating hands:

A. <u>before</u> entry into an occupied patient room

B. upon exit from an occupied patient room

- C. after contact with a patient's skin (does not apply in situations involving mass immunization/skin testing of healthy employees/healthcare workers.)
- D. after contact with body fluids or excretions, mucous membranes, non-intact skin or wound dressings, as long as hands are not visibly soiled
- E. if moving from a contaminated body site to a clean body site during patient care
- F. after contact with inanimate objects (including medical equipment, furniture and environmental surfaces) in the occupied patient room
- G. <u>before</u> caring for patients with severe neutropenia or other forms of severe immune suppression
- H. before donning sterile gloves when inserting a central intravenous catheter
- I. <u>before</u> inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure
- J. ALWAYS after removing gloves
- K. After smoking, or applying make-up/lipstick/lip balm.
- L. After coughing, sneezing and/or blowing your nose.
- M. After completion of the work shift prior to leaving the health care delivery environment.

II. Indications for handwashing

- A. Wash hands with a non-antimicrobial soap and water or an antimicrobial soap and water
 - 1. when hands are visibly soiled or contaminated with proteinaceous material.
 - 2. after contact with body fluids or excretions, mucous membranes, non-intact skin or wound dressings, especially if hands are visibly soiled
 - 3. After using the bathroom.
 - 4. Before and after eating and drinking.
 - 5. Wash hands with non-antimicrobial soap and water or with antimicrobial soap and water if exposure to *Clostridium difficile* or *Bacillus anthracis* is suspected or proven. The physical action of washing and rinsing hands under such circumstances is recommended

because alcohols, chlorhexidine, iodophors and other antiseptic agents have poor activity against spores.

- B. Hand antisepsis using an antimicrobial soap may be practiced
 - 1. in settings where time constraints are not an issue and easy access to hand hygiene facilities are insured, or
 - 2. in rare instances, when a caregiver is intolerant of the waterless antiseptic agent used in the institution.
- **III.Effective Hand Hygiene Procedures** to be effective, hand hygiene should be performed according to one of the following procedures.
- A. ANTISEPTIC HANDRUB PROCEDURE
 - 1. Alcohol-based waterless antiseptic agents will be used.
 - 2. Apply dime-sized quantity of product to palm of one hand and rub hands together, covering all surfaces (between fingers, palms, backs of hands, wrists, forearms, under and around fingernails) until hands are dry.
 - 3. If an adequate volume of alcohol-based handrub is used, it should take 15-25 seconds for hands to dry.
- B. HANDWASHING PROCEDURE:
 - 1. Antimicrobial soap is generally used in patient care areas for handwashing.
 - 2. Administrative and support departments are not required to use antimicrobial soap for routine handwashing. If bar soap is used in any of these areas, the used bar must be stored for use on/in a holder/rack that allows for drainage of water away from the soap.
 - 3. Steps for effective handwashing:
 - a. Remove jewelry.
 - b. Turn on water adjust to comfort level. Avoid using hot water; repeated exposure to hot water may increase risk of dermatitis.
 - c. Wet hands under running water.
 - d. Keeping hands lower than elbows, apply 3-5 ml of soap from dispenser.
 - e. Rub hands together, using friction to clean between fingers, palms, backs of hands, wrists, forearms, and under fingernails.
 - 1. For routine handwashing, this procedure should last at least 15 seconds.
 - 2. For preparation to perform or assist with invasive procedures (outside of the operating room suites), this procedure should last 30-45 seconds.
 - f. Keeping fingers lower than wrists, rinse under running water. Let water run from wrists, over hands and off ends of fingers. Do not touch faucet handles with clean bare hands let water run until hands are dried.
 - g. Dry hands with paper towel. Discard paper towel.
 - h. Using clean, dry paper towel, turn off faucet (if hand operated).
 - i. Use paper towel to open bathroom door. Discard paper towel at first opportunity.
 - 4. Standing water (basins or bowls of collected, caught or poured standing water) may not be used for effective handwashing at any time. The contained pool of water is thoroughly contaminated by the initial entry, becoming increasingly contaminated as more entries are made, and subsequently contaminating everything entering or contacting the water in the bowl or basin.

IV. Skin Care

A. Lotion may be applied to keep skin smooth and free of cracking. As petroleum-based lotions and creams can degrade latex and some vinyl gloves, non-petroleum-based products are recommended for use.

- B. Barrier lotions and hand creams may be used to protect hands from problems caused by excess water, harsh soaps, or irritation caused by prolonged exposure to irritant substances. Use of a barrier lotion or cream does not relieve the employee of the responsibility of appropriate hand hygiene or proper glove utilization.
- C. Lotion and cream dispensers:
 - 1. Pump or squirt dispensers containing lotion or cream must be provided if more than one person on the unit will use the product.
 - 2. A "tub" or "jar" containing lotion or cream may only be used by one person, as the first person to use the product contaminates the contents. The remaining product in the tub can become a source of contamination for all others who access it. If "tub" or "jar" product MUST be used, it must be assigned to a specific patient or employee, be labeled with the name of the sole user, and be used by that person only.

V. Other Aspects of Hand Hygiene

- A. Direct patient care providers (see Definitions and Appendix B) may not wear artificial fingernails or extenders when providing direct care for or having direct contact with patients at University of Colorado Hospital. Natural nail tips should be kept less than 1/4-inch long.
- B. Wear gloves when contact with blood or other potentially infectious materials, , mucous membranes, and non-intact skin could occur.
- C. Remove gloves after caring for a patient. Do not wear the same pair of gloves for the care of more than one patient, and do not wash gloves between patients (does not apply in situations involving mass immunization/skin testing of healthy employees/healthcare workers.).
- D. Change gloves and perform hand hygiene during patient care if moving from a contaminated body site to a clean body site.
- E. No recommendation on wearing rings in healthcare settings. (Unresolved issue at CDC)
- F. Do not add soap to a partially empty soap dispenser. This practice of "topping off" dispensers can lead to bacterial contamination of soap. Use of liquid soap dispensed from collapsible bags that cannot be refilled is recommended.

References:

- 1. Association for Professionals in Infection Control and Epidemiology; "Hand Hygiene", <u>APIC</u> <u>Text of Infection Control and Epidemiology</u>, 3rd Edition, 2009. LEVEL VI
- 2. Boyce, John M., Infection Control and Hospital Epidemiology; 18:622. LEVEL VI
- 3. Centers for Disease Control and Prevention (HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force), <u>Guideline for Hand Hygiene in Healthcare Settings; October,</u> 2002. LEVEL VI
- Mayhall, C. Glenn, editor. <u>Hospital Epidemiology and Infection Control</u>, Lippincott, Williams & Wilkins, 3rd Edition, 2004. LEVEL VI
- 5. Rutala, Wm.; Chemical Germicides in Health Care; Polyscience and APIC, 2010. LEVEL VI

University of Colorado Hospital Policy and Procedure: Cleaning and Disinfection of Toys and Play Materials

Policies/Procedures:

- I. Toys that are provided by University of Colorado Hospital, and are acceptable for use in health care areas include only those that can be cleaned and disinfected. Acceptable toys include toys made of plastic, metal and vinyl. No toys will be used that cannot be immersed in cleaning solution. Fabric, fur toys, dolls or stuffed animals are prohibited as community/shared playthings. Wooden toys that absorb fluids are not acceptable.
- **II.** Toys that have been played with will be cleaned and disinfected after use by each child. All toys will be cleaned at least daily. Play materials are inspected regularly by staff and discarded if worn or heavily soiled.
- **III.** Infant and toddler toys that have been put in the child's mouth should be cleaned and disinfected between individual children's use. When an infant or toddler finishes playing with a toy, the toy should be retrieved and placed in a bin reserved for dirty toys. This bin should be out of the reach of children. Toys can be cleaned at a later time and transferred back to the area for clean toys.
- **IV.** To clean and disinfect toys:
 - A. Remove surface contamination
 - 1. Soap and water
 - a. Scrub the toy in warm, soapy water. If necessary use a brush to reach into crevices.
 - b. Rinse toy in clean water, OR
 - 2. Use a commercial, disposable, pre-moistened cloth "wipe" according to manufacturer's instructions on label to remove surface contamination
 - B. Disinfect toy after cleaning -
 - 1. Immerse toys in, or squirt onto and cover toys with, a properly diluted solution of hospital approved disinfectant. Assure 10 minute contact time for disinfectant on toy. Rinse well and let air dry.
 - 2. Use a commercial, disposable, cloth "wipe" pre-moistened with hospital approved disinfectant(s) to wipe down toy. Assure contact of wipes into crevices on toy. Use wipes according to manufacturer's directions on label, making sure to achieve recommended 5 minute contact time for solution.
- V. Daily documentation of cleaning and disinfection of toys will be maintained on each unit where toys are provided.

References:

- <u>CDC</u>, <u>Division of Healthcare Quality Promotion</u>: "Washing and Disinfecting Toys". January 1997. LEVEL VI
- Colorado Department of Health. <u>The ABC's of Safe and Healthy Child Care</u>, 2/13/98. LEVEL VI
- The Children's Hospital, Denver Colorado. Cleaning of Toys and Play Area, 6/98.
- Kaiser Permanente, Colorado Region. "Toys in Patient Waiting and Patient Care Areas". May 1993.
- Association for Professionals in Infection Control and Epidemiology, Inc., <u>APIC Text of</u> <u>Infection Control and Epidemiology.</u> 2010. LEVEL VI

Handling ITE's and Earmolds

There is a danger of spreading bacterial and fungal infections through handling earmolds and hearing aids without disinfecting them first. Also, there may be blood or ear drainage on the device, which may or may not be visible at first glance. Therefore, do not handle these devices with your bare hands before disinfecting them. Here are several precautionary options:

1. Use a disinfectant wipe to handle the hearing aid/earmold. Have the patient place the device directly into the wipe. You can then wipe the device before handling it **OR**

2. Use a bowl or tissue to capture the device, and then disinfect it with a wipe

Other notes to remember:

1. It is possible there could be dried blood or mucous in the sound ports or vents. Gloves are available if needed.

2. Always sterilize tools used to clean the aid when blood or mucous is found. Disinfect the tools when blood or mucous is not present.

3. Never use any tool or instrument that has not been cleaned, disinfected, or sterilized properly.

Toys

In audiology clinics many times there are toys in the waiting room, exam room, and/or in the sound booth. Follow these guidelines to help control infection:

1. Disinfect used toys daily.

2. Use care when handling the toys. Wash your hands after handling/disinfecting the toys.

3. Always replace broken or old toys.

Disposable Items in Clinic

The following items are disposable in our clinic, therefore eliminating the need for infection control:

1. Insert earphones

Non-Disposable Items in Clinic

These are not disposable:

1. Ear impressions syringes and probe light tips are to be cleaned and disinfected after each use. If blood or mucous is noted, sterilize these items.

2. Immittance probe tips are to be sterilized after each use.

3. Otoscopic specula

Appendix C: Scope of Practice in Audiology

Ad Hoc Committee on Scope of Practice in Audiology American Speech-Language-Hearing Association. (2004). Scope of Practice in Audiology [Scope of Practice].

Available from www.asha.org/policy. Index terms: scope of practice doi:10.1044/policy.SP2004-00192

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About This Document

This scope of practice in audiology statement is an official policy of the American Speech-Language-Hearing Association (ASHA). The document was developed by the Coordinating Committee for the ASHA vice president for professional practices in audiology and approved in 2003 by the Legislative Council (11-03). Members of the coordinating committee include Donna Fisher Smiley (chair), Michael Bergen, and Jean-Pierre Gagné with Vic S. Gladstone and Tina R. Mullins (ex officios). Susan Brannen, ASHA vice president for professional practices in audiology (2001– 2003), served as monitoring vice president. This statement supersedes the Scope of Practice in Audiology statement (LC 08-95), (ASHA, 1996).

Statement of Purpose The purpose of this document is to define the scope of practice in audiology in order to (a) describe the services offered by qualified audiologists as primary service providers, case managers, and/or members of multidisciplinary and interdisciplinary teams; (b) serve as a reference for health care, education, and other professionals, and for consumers, members of the general public, and policy makers concerned with legislation, regulation, licensure, and third party reimbursement; and (c) inform members of ASHA, certificate holders, and students of the activities for which certification in audiology is required in accordance with the ASHA Code of Ethics. Audiologists provide comprehensive diagnostic and treatment/rehabilitative services for auditory, vestibular, and related impairments. These services are provided to individuals across the entire age span from birth through adulthood; to individuals from diverse language, ethnic, cultural, and socioeconomic backgrounds; and to individuals who have multiple disabilities. This position statement is not intended to be exhaustive; however, the activities described reflect current practice within the profession. Practice activities related to emerging clinical, technological, and scientific developments are not precluded from consideration as part of the scope of practice of an audiologist. Such innovations and advances will result in the periodic revision and updating of this document. It is also recognized that specialty areas identified within the scope of practice will vary among the individual providers. ASHA also recognizes that credentialed professionals in related fields may have knowledge, skills, and experience that could be applied to some areas within the scope of audiology practice. Defining the scope of practice of audiologists is not meant to exclude other appropriately credentialed postgraduate professionals from rendering services in common practice areas.

Audiologists serve diverse populations. The patient/client population includes persons of different race, age, gender, religion, national origin, and sexual orientation. Audiologists' caseloads include

individuals from diverse ethnic, cultural, or linguistic backgrounds, and persons with disabilities. Although audiologists are prohibited from discriminating in the provision of professional services based on these factors, in some cases such factors may be relevant to the development of an appropriate treatment plan. These factors may be considered in treatment plans only when firmly grounded in scientific and professional knowledge.

This scope of practice does not supersede existing state licensure laws or affect the interpretation or implementation of such laws. It may serve, however, as a model for the development or modification of licensure laws. The schema in Figure 1 depicts the relationship of the scope of practice to ASHA's policy documents that address current and emerging audiology practice areas; that is, preferred practice patterns, guidelines, and position statements. ASHA members and ASHA-certified professionals are bound by the ASHA Code of Ethics to provide services that are consistent with the scope of their competence, education, and experience (ASHA, 2003). There are other existing legislative and regulatory bodies that govern the practice of audiology.

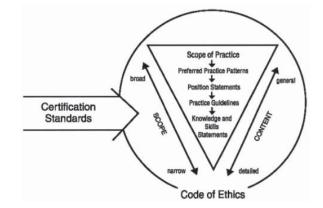


Figure 1. Conceptual Framework of ASHA Standards and Policy Statements

Framework for Practice

The practice of audiology includes both the prevention of and assessment of auditory, vestibular, and related impairments as well as the habilitation/rehabilitation and maintenance of persons with these impairments. The overall goal of the provision of audiology services should be to optimize and enhance the ability of an individual to hear, as well as to communicate in his/her everyday or natural environment. In addition, audiologists provide comprehensive services to individuals with normal hearing who interact with persons with a hearing impairment. The overall goal of audiologic services is to improve the quality of life for all of these individuals.

The World Health Organization (WHO) has developed a multipurpose health classification system known as the International Classification of Functioning, Disability, and Health (ICF) (WHO, 2001). The purpose of this classification system is to provide a standard language and framework for the description of functioning and health. The ICF framework is useful in describing the role of audiologists in the prevention, assessment, and habilitation/rehabilitation of auditory, vestibular, and other related impairments and restrictions or limitations of functioning.

The ICF is organized into two parts. The first part deals with Functioning and Disability while the second part deals with Contextual Factors. Each part has two components.

The components of Functioning and Disability are:

• **Body Functions and Structures:** Body Functions are the physiological functions of body systems and Body Structures are the anatomical parts of the body and their components. Impairments are limitations or variations in Body Function or Structure such as a deviation or loss. An example of a Body Function that might be evaluated by an audiologist would be hearing

sensitivity. The use of tympanometry to access the mobility of the tympanic membrane is an example of a Body Structure that might be evaluated by an audiologist.

• Activity/Participation: In the ICF, Activity and Participation are realized as one list. Activity refers to the execution of a task or action by an individual. Participation is the involvement in a life situation. Activity limitations are difficulties an individual may experience while executing a given activity. Participation restrictions are difficulties that may limit an individual's

involvement in life situations. The Activity/Participation construct thus represents the effects that hearing, vestibular, and related impairments could have on the life of an individual. These effects could include the ability to hold

conversations, participate in sports, attend religious services, understand a teacher in a classroom, and walk up and down stairs.

The components of Contextual Factors are:

• Environmental Factors: Environmental Factors make up the physical, social, and attitudinal environment in which people live and conduct their lives. Examples of Environmental Factors, as they relate to audiology, include the acoustical properties of a given space and any type of hearing assistive technology.

• **Personal Factors**: Personal Factors are the internal influences on an individual's functioning and disability and are not a part of the health condition. These factors may include but are not limited to age, gender, social background, and profession.

Functioning and Disability are interactive and evolutionary processes. Figure 2 illustrates the interaction of the various components of the ICF. Each component of the ICF can be expressed on a continuum of function. On one end of the continuum is intact functioning. At the opposite end of the continuum is completely compromised functioning. Contextual Factors (Environmental and Personal Factors) may interact with any of the components of functioning and disability. Environmental and Personal Factors may act as facilitators or barriers to functioning.

The scope of practice in audiology encompasses all of the components of the ICF. During the assessment phase, audiologists perform tests of Body Function and Structure. Examples of these types of tests include otoscopic examination, puretone audiometry, tympanometry, otoacoustic emissions measurements, and speech audiometry. Activity/Participation limitations and restrictions are sometimes addressed by audiologists through case history, interview, questionnaire, and counseling. For example, a question such as "Do you have trouble understanding while on the telephone?" or "Can you describe the difficulties you experience when you participate in a

conversation with someone who is not familiar to you?" would be considered an assessment of Activity/Participation limitation or restriction. Questionnaires that require clients to report the magnitude of difficulty that they experience in certain specified settings can sometimes be used to measure aspects of Activity/Participation. For example: "Because of my hearing problems, I have difficulty conversing with others in a restaurant." In addition, Environmental and Personal Factors also need to be taken into consideration by audiologists as they treat individuals with auditory, vestibular, and other related impairments. In the above question regarding conversation in a restaurant, if the factor of "noise" (i.e., a noisy restaurant) is added to the question, this represents an Environmental

Factor. Examples of Personal Factors might include a person's background or culture that influences his or her reaction to the use of a hearing aid or cochlear implant. The use of the ICF framework (WHO, 2001) may help audiologists broaden their perspective concerning their role in evaluating a client's needs or when designing and providing comprehensive services to their clients. Overall, audiologists work to improve quality of life by reducing impairments of body functions and structures, Activity limitations/Participation restrictions and Environmental barriers of the individuals they serve.

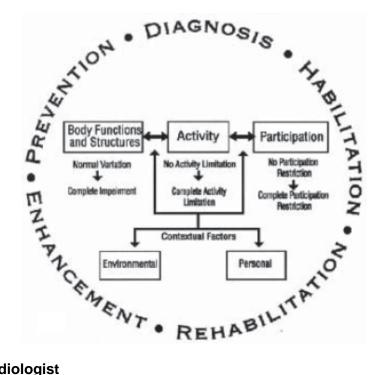


Figure 2. Application of WHO (2001) Framework to the Practice of Audiology

Definition of an Audiologist

Audiologists are professionals engaged in autonomous practice to promote healthy hearing, communication competency, and quality of life for persons of all ages through the prevention, identification, assessment, and rehabilitation of hearing, auditory function, balance, and other related systems. They facilitate prevention through the fitting of hearing protective devices, education programs for industry and the public, hearing screening/conservation programs, and research. The audiologist is the professional responsible for the identification of impairments and dysfunction of the auditory, balance, and other related systems. Their unique education and training provides them with the skills to assess and diagnose dysfunction in hearing, auditory function, balance, and related disorders. The delivery of audiologic (re)habilitation services includes not only

the selecting, fitting, and dispensing of hearing aids and other hearing assistive devices, but also the assessment and follow-up services for persons with cochlear implants. The audiologist providing audiologic (re)habilitation does so through a comprehensive program of therapeutic services, devices, counseling, and other management strategies. Functional diagnosis of vestibular disorders and management of balance rehabilitation is another aspect of the professional responsibilities of the audiologist. Audiologists engage in research pertinent to all of these domains. Audiologists currently hold a master's or doctoral degree in audiology from a program accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association. ASHA-certified audiologists complete a supervised postgraduate professional experience or a similar supervised professional experience during the completion of the doctoral degree as described in the ASHA certification standards. Beginning January 1, 2012, all applicants for the Certificate of Clinical Competence in Audiology must have a doctoral degree from a CAA-accredited university program. Demonstration of continued professional development is mandated for the maintenance of the Certificate of Clinical Competence in Audiology. Where required, audiologists are licensed or registered by the state in which they practice.

Professional Roles and Activities

Audiologists serve a diverse population and may function in one or more of a variety of activities. The practice of audiology includes:

A. Prevention

1. Promotion of hearing wellness, as well as the prevention of hearing loss and protection of hearing function by designing, implementing, and coordinating occupational, school, and community hearing conservation and identification programs;

2. Participation in noise measurements of the acoustic environment to improve accessibility and to promote hearing wellness.

B. Identification

1. Activities that identify dysfunction in hearing, balance, and other auditory related systems;

2. Supervision, implementation, and follow-up of newborn and school hearing screening programs;

3. Screening for speech, orofacial myofunctional disorders, language, cognitive communication disorders, and/or preferred communication modalities that may affect education, health, development or communication and may result in

recommendations for rescreening or comprehensive speech-language pathology assessment or in referral for other examinations or services;

4. Identification of populations and individuals with or at risk for hearing loss and other auditory dysfunction, balance impairments, tinnitus, and associated communication impairments as well as of those with normal hearing;

5. In collaboration with speech-language pathologists, identification of populations and individuals at risk for developing speech-language impairments.

C. Assessment

1. The conduct and interpretation of behavioral, electroacoustic, and/or electrophysiologic methods to assess hearing, auditory function, balance, and related systems;

2. Measurement and interpretation of sensory and motor evoked potentials, electromyography, and other electrodiagnostic tests for purposes of neurophysiologic intraoperative monitoring and cranial nerve assessment;

3. Evaluation and management of children and adults with auditory-related processing disorders;

4. Performance of otoscopy for appropriate audiological management or to provide a basis for medical referral;

5. Cerumen management to prevent obstruction of the external ear canal and of amplification devices;

6. Preparation of a report including interpreting data, summarizing findings, generating recommendations and developing an audiologic treatment/ management plan;

7. Referrals to other professions, agencies, and/ or consumer organizations. D. Rehabilitation

1. As part of the comprehensive audiologic (re)habilitation program, evaluates, selects, fits and dispenses hearing assistive technology devices to include hearing aids;

 Assessment of candidacy of persons with hearing loss for cochlear implants and provision of fitting, mapping, and audiologic rehabilitation to optimize device use;
 Development of a culturally appropriate, audiologic rehabilitative management plan including, when appropriate:

a. Recommendations for fitting and dispensing, and educating the consumer and family/caregivers in the use of and adjustment to sensory aids, hearing assistive devices, alerting systems, and captioning devices;

b. Availability of counseling relating to psycho social aspects of hearing loss, and other auditory dysfunction, and processes to enhance communication competence;

c. Skills training and consultation concerning environmental modifications to facilitate development of receptive and expressive communication;

d. Evaluation and modification of the audiologic management plan. 4. Provision of comprehensive audiologic rehabilitation services, including management procedures for speech and language habilitation and/or rehabilitation for persons with hearing loss or other auditory dysfunction, including but not exclusive to speechreading, auditory training, communication strategies, manual communication and counseling for psychosocial adjustment for persons with hearing loss or other auditory dysfunction and their families/caregivers;

5. Consultation and provision of vestibular and balance rehabilitation therapy to persons with vestibular and balance impairments;

6. Assessment and non-medical management of tinnitus using biofeedback,

behavioral management, masking, hearing aids, education, and counseling; 7. Provision of training for professionals of related and/or allied services when needed;

8. Participation in the development of an Individual Education Program (IEP) for school-age children or an Individual Family Service Plan (IFSP) for children from birth to 36 months old;

9. Provision of in-service programs for school personnel, and advising school districts in planning educational programs and accessibility for students with hearing loss and other auditory dysfunction;

10. Measurement of noise levels and provision of recommendations for environmental modifications in order to reduce the noise level; 11. Management of the selection, purchase, installation, and evaluation of large-area amplification systems.

E. Advocacy/ Consultation

1. Advocacy for communication needs of all individuals that may include advocating for the rights/funding of services for those with hearing loss, auditory, or vestibular disorders;

2. Advocacy for issues (i.e., acoustic accessibility) that affect the rights of individuals with normal hearing;

 Consultation with professionals of related and/or allied services when needed;
 Consultation in development of an Individual Education Program (IEP) for schoolage children or an Individual Family Service Plan (IFSP) for children from birth to 36 months old;

 Consultation to educators as members of interdisciplinary teams about communication management, educational implications of hearing loss and other auditory dysfunction, educational programming, classroom acoustics, and large-area amplification systems for children with hearing loss and other auditory dysfunction;
 Consultation about accessibility for persons with hearing loss and other auditory dysfunction in public and private buildings, programs, and services;

7. Consultation to individuals, public and private agencies, and governmental bodies, or as an expert witness regarding legal interpretations of audiology findings, effects of hearing loss and other auditory dysfunction, balance system impairments, and relevant noise-related considerations;

8. Case management and service as a liaison for the consumer, family, and agencies in order to monitor audiologic status and management and to make

recommendations about educational and vocational programming;

9. Consultation to industry on the development of products and instrumentation related to the measurement and management of auditory or balance function.

F. Education/ Research/Administration

1. Education, supervision, and administration for audiology graduate and other professional education programs;

2. Measurement of functional outcomes, consumer satisfaction, efficacy, effectiveness, and efficiency of practices and programs to maintain and improve the quality of audiologic services;

3. Design and conduct of basic and applied audiologic research to increase the knowledge base, to develop new methods and programs, and to determine the efficacy, effectiveness, and efficiency of assessment and treatment paradigms; disseminate research findings to other professionals and to the public;

4. Participation in the development of professional and technical standards;

5. Participation in quality improvement programs;

6. Program administration and supervision of professionals as well as support personnel.

Practice Settings

Audiologists provide services in private practice; medical settings such as hospitals and physicians' offices; community and university hearing and speech centers; managed care systems; industry; the military; various state agencies; home health, subacute rehabilitation, long-term care, and intermediate-care facilities; and school systems. Audiologists provide academic education to students and practitioners in universities, to medical and surgical students and residents, and to other related professionals. Such education pertains to the identification, functional

diagnosis/assessment, and non-medical treatment/management of auditory, vestibular, balance, and related impairments.

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Appendix D: ASHA Code of Ethics



American Speech-Language-Hearing Association

CODE OF ETHICS

Reference this material as: American Speech–Language–Hearing Association. (2016). Code of Ethics [Ethics]. Available from www.asha.org/policy.

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PREAMBLE

The American Speech-Language-Hearing Association (ASHA; hereafter, also known as "The Association") has been committed to a framework of common principles and standards of practice since ASHA's inception in 1925. This commitment was formalized in 1952 as the Association's first Code of Ethics. This Code has been modified and adapted as society and the professions have changed. The Code of Ethics reflects what we value as professionals and establishes expectations for our scientific and clinical practice based on principles of duty, accountability, fairness, and responsibility. The ASHA Code of Ethics is intended to ensure the welfare of the consumer and to protect the reputation and integrity of the professions.

The ASHA Code of Ethics is a framework and focused guide for professionals in support of day-to-day decision making related to professional conduct. The Code is partly obligatory and disciplinary and partly aspirational and descriptive in that it defines the professional's role. The Code educates professionals in the discipline, as well as students, other professionals, and the public, regarding ethical principles and standards that direct professional conduct.

The preservation of the highest standards of integrity and ethical principles is vital to the responsible discharge of obligations by audiologists, speech-language pathologists, and speech, language, and hearing scientists who serve as clinicians, educators, mentors, researchers, supervisors, and administrators. This Code of Ethics sets forth the fundamental principles and rules considered essential to this purpose and is applicable to the following individuals:

- a member of the American Speech-Language-Hearing Association holding the Certificate of Clinical Competence (CCC)
- a member of the Association not holding the Certificate of Clinical Competence (CCC)
- a nonmember of the Association holding the Certificate of Clinical Competence (CCC)
- an applicant for certification, or for membership and certification

By holding ASHA certification or membership, or through application for such, all individuals are automatically subject to the jurisdiction of the Board of Ethics for ethics complaint adjudication. Individuals who provide clinical services and who also desire membership in the Association must hold the CCC.

The fundamentals of ethical conduct are described by Principles of Ethics and by Rules of Ethics. The four Principles of Ethics form the underlying philosophical basis for the Code of Ethics and are reflected in the following areas: (I) responsibility to persons served professionally and to research participants, both human and animal; (II) responsibility for

one's professional competence; (III) responsibility to the public; and (IV) responsibility for professional relationships. Individuals shall honor and abide by these Principles as affirmative obligations under all conditions of applicable professional activity. Rules of Ethics are specific statements of minimally acceptable as well as unacceptable professional conduct.

The Code is designed to provide guidance to members, applicants, and certified individuals as they make professional decisions. Because the Code is not intended to address specific situations and is not inclusive of all possible ethical dilemmas, professionals are expected to follow the written provisions and to uphold the spirit and purpose of the Code. Adherence to the Code of Ethics and its enforcement results in respect for the

professions and positive outcomes for individuals who benefit from the work of audiologists, speech-language pathologists, and speech, language, and hearing scientists.

TERMINOLOGY

ASHA Standards and Ethics – The mailing address for self-reporting in writing is American Speech-Language-Hearing Association, Standards and Ethics, 2200 Research Blvd., #313, Rockville, MD 20850.

advertising – Any form of communication with the public about services, therapies, products, or publications.

conflict of interest – An opposition between the private interests and the official or professional responsibilities of a person in a position of trust, power, and/or authority.

crime – Any felony; or any misdemeanor involving dishonesty, physical harm to the person or property of another, or a threat of physical harm to the person or property of another. For more details, see the "Disclosure Information" section of applications for ASHA certification found on <u>www.asha.org/certification/AudCertification/</u> and <u>www.asha.org/certification/SLPCertification/</u>.

diminished decision-making ability – Any condition that renders a person unable to form the specific intent necessary to determine a reasonable course of action.

fraud – Any act, expression, omission, or concealment—the intent of which is either actual or constructive— calculated to deceive others to their disadvantage.

impaired practitioner – An individual whose professional practice is adversely affected by addiction, substance abuse, or health-related and/or mental health–related conditions.

individuals – Members and/or certificate holders, including applicants for certification.

informed consent – May be verbal, unless written consent is required; constitutes consent by persons served, research participants engaged, or parents and/or guardians of persons served to a proposed course of action after the communication of adequate information regarding expected outcomes and potential risks.

jurisdiction – The "personal jurisdiction" and authority of the ASHA Board of Ethics over an individual holding ASHA certification and/or membership, regardless of the individual's geographic location.

know, known, or knowingly – Having or reflecting knowledge.

may vs. shall – May denotes an allowance for discretion; shall denotes no discretion.

misrepresentation – Any statement by words or other conduct that, under the circumstances, amounts to an assertion that is false or erroneous (i.e., not in accordance with the facts); any statement made with conscious ignorance or a reckless disregard for the truth.

negligence – Breaching of a duty owed to another, which occurs because of a failure to conform to a requirement, and this failure has caused harm to another individual, which led to damages to this person(s); failure to exercise the care toward others that a reasonable or prudent person would take in the circumstances, or taking actions that such a reasonable person would not.

nolo contendere – No contest.

plagiarism – False representation of another person's idea, research, presentation, result, or product as one's own through irresponsible citation, attribution, or paraphrasing; ethical misconduct does not include honest error or differences of opinion.

publicly sanctioned – A formal disciplinary action of public record, excluding actions due to insufficient continuing education, checks returned for insufficient funds, or late payment of fees not resulting in unlicensed practice.

reasonable or reasonably – Supported or justified by fact or circumstance and being in accordance with reason, fairness, duty, or prudence.

self-report – A professional obligation of self-disclosure that requires (a) notifying ASHA Standards and Ethics and (b) mailing a hard copy of a certified document to ASHA Standards and Ethics (see term above). All self-reports are subject to a separate ASHA Certification

review process, which, depending on the seriousness of the self-reported information, takes additional processing time.

shall vs. may – Shall denotes no discretion; may denotes an allowance for discretion.

support personnel – Those providing support to audiologists, speech-language pathologists, or speech, language, and hearing scientists (e.g., technician, paraprofessional, aide, or assistant in audiology, speech-language pathology, or communication sciences and disorders).

telepractice, teletherapy – Application of telecommunications technology to the delivery of audiology and speech-language pathology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation. The quality of the service should be equivalent to in-person service.

written - Encompasses both electronic and hard-copy writings or communications.

PRINCIPLE OF ETHICS I

Individuals shall honor their responsibility to hold paramount the welfare of persons they serve professionally or who are participants in research and scholarly activities, and they shall treat animals involved in research in a humane manner.

RULES OF ETHICS

- A. Individuals shall provide all clinical services and scientific activities competently.
- B. Individuals shall use every resource, including referral and/or interprofessional collaboration when appropriate, to ensure that quality service is provided.
- C. Individuals shall not discriminate in the delivery of professional services or in the conduct of research and scholarly activities on the basis of race, ethnicity, sex, gender identity/gender expression, sexual orientation, age, religion, national origin, disability, culture, language, or dialect.
- D. Individuals shall not misrepresent the credentials of aides, assistants, technicians, support personnel, students, research interns, Clinical Fellows, or any others under their supervision, and they shall inform those they serve professionally of the name, role, and professional credentials of persons providing services.
- E. Individuals who hold the Certificate of Clinical Competence may delegate tasks related to the provision of clinical services to aides, assistants, technicians, support personnel, or any other persons only if those persons are adequately prepared and are appropriately supervised. The responsibility for the welfare of those being served remains with the certified individual.
- F. Individuals who hold the Certificate of Clinical Competence shall not delegate tasks that require the

unique skills, knowledge, judgment, or credentials that are within the scope of their profession to aides, assistants, technicians, support personnel, or any nonprofessionals over whom they have supervisory responsibility.

- G. Individuals who hold the Certificate of Clinical Competence may delegate to students tasks related to the provision of clinical services that require the unique skills, knowledge, and judgment that are within the scope of practice of their profession only if those students are adequately prepared and are appropriately supervised. The responsibility for the welfare of those being served remains with the certified individual.
- H. Individuals shall obtain informed consent from the persons they serve about the nature and possible risks and effects of services provided, technology employed, and products dispensed. This obligation also includes informing persons served about possible effects of not engaging in treatment or not following clinical recommendations. If diminished decision-making ability of persons served is suspected, individuals should seek appropriate authorization for services, such as authorization from a spouse, other family member, or legally authorized/appointed representative.
- I. Individuals shall enroll and include persons as participants in research or teaching demonstrations only if participation is voluntary, without coercion, and with informed consent.
- J. Individuals shall accurately represent the intended purpose of a service, product, or research endeavor and shall abide by established guidelines for clinical practice and the responsible conduct of research.
- K. Individuals who hold the Certificate of Clinical Competence shall evaluate the effectiveness of services provided, technology employed, and products dispensed, and they shall provide services or dispense products only when benefit can reasonably be expected.
- L. Individuals may make a reasonable statement of prognosis, but they shall not guarantee—directly or by implication—the results of any treatment or procedure.
- M. Individuals who hold the Certificate of Clinical Competence shall use independent and evidence-based clinical judgment, keeping paramount the best interests of those being served.
- N. Individuals who hold the Certificate of Clinical Competence shall not provide clinical services solely by correspondence, but may provide services via telepractice consistent with professional standards and state and federal regulations.
- O. Individuals shall protect the confidentiality and security of records of professional services provided, research and scholarly activities conducted, and products dispensed. Access to these records shall be allowed only when doing so is necessary to protect the welfare of the person or of the community, is legally authorized, or is otherwise required by law.
- P. Individuals shall protect the confidentiality of any professional or personal information about persons served professionally or participants involved in research and scholarly activities and may disclose confidential information only when doing so is necessary to protect the welfare of the person or of the community, is legally authorized, or is otherwise required by law.
- Q. Individuals shall maintain timely records and accurately record and bill for services provided and products dispensed and shall not misrepresent services provided, products dispensed, or research and scholarly activities conducted.
- R. Individuals whose professional practice is adversely affected by substance abuse, addiction, or other health-related conditions are impaired practitioners and shall seek professional assistance and, where appropriate, withdraw from the affected areas of practice.
- S. Individuals who have knowledge that a colleague is unable to provide professional services with reasonable skill and safety shall report this information to the appropriate authority, internally if a mechanism exists and, otherwise, externally.
- T. Individuals shall provide reasonable notice and information about alternatives for obtaining care in the

event that they can no longer provide professional services.

PRINCIPLE OF ETHICS II

Individuals shall honor their responsibility to achieve and maintain the highest level of professional competence and performance.

RULES OF ETHICS

- A. Individuals who hold the Certificate of Clinical Competence shall engage in only those aspects of the professions that are within the scope of their professional practice and competence, considering their certification status, education, training, and experience.
- B. Members who do not hold the Certificate of Clinical Competence may not engage in the provision of clinical services; however, individuals who are in the certification application process may engage in the provision of clinical services consistent with current local and state laws and regulations and with ASHA certification requirements.
- C. Individuals who engage in research shall comply with all institutional, state, and federal regulations that address any aspects of research, including those that involve human participants and animals.
- D. Individuals shall enhance and refine their professional competence and expertise through engagement in lifelong learning applicable to their professional activities and skills.
- E. Individuals in administrative or supervisory roles shall not require or permit their professional staff to provide services or conduct research activities that exceed the staff member's certification status, competence, education, training, and experience.
- F. Individuals in administrative or supervisory roles shall not require or permit their professional staff to provide services or conduct clinical activities that compromise the staff member's independent and objective professional judgment.

PRINCIPLE OF ETHICS III

Individuals shall honor their responsibility to the public when advocating for the unmet communication and swallowing needs of the public and shall provide accurate information involving any aspect of the professions.

RULES OF ETHICS

- A. Individuals shall not misrepresent their credentials, competence, education, training, experience, and scholarly contributions.
- B. Individuals shall avoid engaging in conflicts of interest whereby personal, financial, or other considerations have the potential to influence or compromise professional judgment and objectivity.

- C. Individuals shall not misrepresent research and scholarly activities, diagnostic information, services provided, results of services provided, products dispensed, or the effects of products dispensed.
- D. Individuals shall not defraud through intent, ignorance, or negligence or engage in any scheme to defraud in connection with obtaining payment, reimbursement, or grants and contracts for services provided, research conducted, or products dispensed.
- E. Individuals' statements to the public shall provide accurate and complete information about the nature and management of communication disorders, about the professions, about professional services, about products for sale, and about research and scholarly activities.
- F. Individuals' statements to the public shall adhere to prevailing professional norms and shall not contain misrepresentations when advertising, announcing, and promoting their professional services and products and when reporting research results.
- G. Individuals shall not knowingly make false financial or nonfinancial statements and shall complete all materials honestly and without omission.

PRINCIPLE OF ETHICS IV

Individuals shall uphold the dignity and autonomy of the professions, maintain collaborative and harmonious interprofessional and intraprofessional relationships, and accept the professions' self-imposed standards.

RULES OF ETHICS

- A. Individuals shall work collaboratively, when appropriate, with members of one's own profession and/or members of other professions to deliver the highest quality of care.
- B. Individuals shall exercise independent professional judgment in recommending and providing professional services when an administrative mandate, referral source, or prescription prevents keeping the welfare of persons served paramount.
- C. Individuals' statements to colleagues about professional services, research results, and products shall adhere to prevailing professional standards and shall contain no misrepresentations.
- D. Individuals shall not engage in any form of conduct that adversely reflects on the professions or on the individual's fitness to serve persons professionally.
- E. Individuals shall not engage in dishonesty, negligence, fraud, deceit, or misrepresentation.
- F. Applicants for certification or membership, and individuals making disclosures, shall not knowingly make false statements and shall complete all application and disclosure materials honestly and without omission.
- G. Individuals shall not engage in any form of harassment, power abuse, or sexual harassment.
- H. Individuals shall not engage in sexual activities with individuals (other than a spouse or other individual with whom a prior consensual relationship exists) over whom they exercise professional authority or power, including persons receiving services, assistants, students, or research participants.
- I. Individuals shall not knowingly allow anyone under their supervision to engage in any practice that violates the Code of Ethics.

- J. Individuals shall assign credit only to those who have contributed to a publication, presentation, process, or product. Credit shall be assigned in proportion to the contribution and only with the contributor's consent.
- K. Individuals shall reference the source when using other persons' ideas, research, presentations, results, or products in written, oral, or any other media presentation or summary. To do otherwise constitutes plagiarism.
- L. Individuals shall not discriminate in their relationships with colleagues, assistants, students, support personnel, and members of other professions and disciplines on the basis of race, ethnicity, sex, gender identity/gender expression, sexual orientation, age, religion, national origin, disability, culture, language, dialect, or socioeconomic status.
- M. Individuals with evidence that the Code of Ethics may have been violated have the responsibility to work collaboratively to resolve the situation where possible or to inform the Board of Ethics through its established procedures.
- N. Individuals shall report members of other professions who they know have violated standards of care to the appropriate professional licensing authority or board, other professional regulatory body, or professional association when such violation compromises the welfare of persons served and/or research participants.
- 0. Individuals shall not file or encourage others to file complaints that disregard or ignore facts that would disprove the allegation; the Code of Ethics shall not be used for personal reprisal, as a means of addressing personal animosity, or as a vehicle for retaliation.
- P. Individuals making and responding to complaints shall comply fully with the policies of the Board of Ethics in its consideration, adjudication, and resolution of complaints of alleged violations of the Code of Ethics.
- Q. Individuals involved in ethics complaints shall not knowingly make false statements of fact or withhold relevant facts necessary to fairly adjudicate the complaints.
- R. Individuals shall comply with local, state, and federal laws and regulations applicable to professional practice, research ethics, and the responsible conduct of research.
- S. Individuals who have been convicted; been found guilty; or entered a plea of guilty or nolo contendere to (1) any misdemeanor involving dishonesty, physical harm—or the threat of physical harm—to the person or property of another, or (2) any felony, shall self-report by notifying ASHA Standards and Ethics (see Terminology for mailing address) in writing within 30 days of the conviction, plea, or finding of guilt. Individuals shall also provide a certified copy of the conviction, plea, nolo contendere record, or docket entry to ASHA Standards and Ethics within 30 days of self-reporting.
- T. Individuals who have been publicly sanctioned or denied a license or a professional credential by any professional association, professional licensing authority or board, or other professional regulatory body shall self-report by notifying ASHA Standards and Ethics (see Terminology for mailing address) in writing within 30 days of the final action or disposition. Individuals shall also provide a certified copy of the final action, sanction, or disposition to ASHA Standards and Ethics within 30 days of self-reporting.

Appendix E: Audiology Certification Standards (2020)

From: Council for Clinical Certification in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. (2018). *2020 Standards for the Certificate of Clinical Competence in Audiology.* Retrieved from www.asha.org/certification/2020-Audiology-Certification-Standards/

2020 Standards and Implementation Procedures for the Certificate of Clinical Competence in Audiology Effective Date: January 1, 2020

Effective Date: January 1, 20

Introduction

The Council for Clinical Certification in Audiology and Speech-Language Pathology (CFCC) is a semi-autonomous credentialing body of the American Speech-Language-Hearing Association. The charges to the CFCC are: to define the standards for clinical certification; to apply those standards in granting certification to individuals; to have final authority to withdraw certification in cases where certification has been granted on the basis of inaccurate information; and to administer the certification maintenance program.

A Practice and Curriculum Analysis of the Profession of Audiology was conducted in 2016 under the auspices of the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) and the CFCC. The survey analysis was reviewed by the CFCC, and the following standards were developed to better fit current practice models.

The 2020 standards and implementation procedures for the Certificate of Clinical Competence in Audiology (CCC-A) go into effect on January 1, 2020. View the Audiology Standards Crosswalk[PDF] and consult Changes to Audiology Standards for more specific information on how the standards will change.

The Standards for the CCC-A are shown in bold. The CFCC implementation procedures follow each standard.

- Standard I—Academic Qualifications
- Standard II—Knowledge and Skills Outcomes
- Standard III—Verification of Knowledge and Skills
- Standard IV—Examination
- Standard V—Maintenance of Certification

Standard I: Academic Qualifications

Applicants for certification must hold a doctoral degree in audiology from a program accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) or equivalent.

Implementation: Verification of the graduate degree is accomplished by submitting (a) an official transcript showing that the degree has been awarded or (b) a letter from the university registrar verifying completion of requirements for the degree. Applicants must have graduated from a program holding CAA accreditation or candidacy status in audiology throughout the period of enrollment.

Applicants from non–CAA-accredited programs (e.g., PhD programs, internationally educated, etc.) with a doctoral degree and audiology coursework will have their application evaluated by the Council for Clinical Certification in Audiology and Speech-Language Pathology (CFCC) to determine substantial equivalence to a clinical doctoral degree program accredited by the CAA. Individuals educated outside the United States or its territories must submit official transcripts and evaluations of their degrees and courses to verify equivalency. These evaluations must be conducted by credential evaluation services agencies recognized by the National Association of Credential Evaluation Services (NACES). Evaluations must (a) confirm that the degree earned is equivalent to a U.S. clinical doctoral degree, (b) show that the coursework is equivalent to a CAA-accredited clinical doctoral program, (c) include a translation of academic coursework into the American semesterhour system, and (d) indicate which courses were completed at the graduate level.

Standard II: Knowledge and Skills Outcomes

Applicants for certification must have acquired knowledge and developed skills in the professional areas of practice as identified in Standards II A–F, as verified in accordance with Standard III.

Implementation: The knowledge and skills identified in this standard, although separated into areas of practice, are not independent of each other. The competent practice of audiology requires that an audiologist be able to integrate across all areas of practice. Therefore, assessments used to verify knowledge and skills acquisition must require that the candidate for certification demonstrate integration of the knowledge and skills found in Standards II A – F below.

Standard II-A: Foundations of Practice

Applicant has demonstrated knowledge of:

A1. Genetics, embryology and development of the auditory and vestibular systems, anatomy and physiology, neuroanatomy and neurophysiology, and pathophysiology of hearing and balance over the life span

A2. Effects of pathogens, and pharmacologic and teratogenic agents, on the auditory

and vestibular systems

A3. Language and speech characteristics and their development for individuals with normal and impaired hearing across the life span

A4. Principles, methods, and applications of acoustics, psychoacoustics, and speech perception, with a focus on how each is impacted by hearing impairment throughout the life span

A5. Calibration and use of instrumentation according to manufacturers' specifications and accepted standards

A6. Standard safety precautions and cleaning/disinfection of equipment in accordance with facility-specific policies and manufacturers' instructions to control for infectious/contagious diseases

A7. Applications and limitations of specific audiologic assessments and interventions in the context of overall client/patient management

A8. Implications of cultural and linguistic differences, as well as individual preferences and needs, on clinical practice and on families, caregivers, and other interested parties

A9. Implications of biopsychosocial factors in the experience of and adjustment to auditory disorders and other chronic health conditions

A10. Effects of hearing impairment on educational, vocational, social, and psychological function throughout the life span

A11. Manual and visual communication systems and the use of interpreters/transliterators/translators

A12. Effective interaction and communication with clients/patients, families, professionals, and other individuals through written, spoken, and nonverbal communication

A13. Principles of research and the application of evidence-based practice (i.e., scientific evidence, clinical expertise, and client/patient perspectives) for accurate and effective clinical decision making

A14. Assessment of diagnostic efficiency and treatment efficacy through the use of quantitative data (e.g., number of tests, standardized test results) and qualitative data (e.g., standardized outcome measures, client/patient-reported measures)

A15. Client-centered, behavioral, cognitive, and integrative theories and methods of counseling and their relevance in audiologic rehabilitation

A16. Principles and practices of client/patient/person/family-centered care, including the role and value of clients'/patients' narratives, clinician empathy, and shared decision making regarding treatment options and goals

A17. Importance, value, and role of interprofessional communication and practice in patient care

A18. The role, scope of practice, and responsibilities of audiologists and other related professionals

A19. Health care, private practice, and educational service delivery systems

A20. Management and business practices, including but not limited to cost analysis, budgeting, coding, billing and reimbursement, and patient management

A21. Advocacy for individual patient needs and for legislation beneficial to the profession and the individuals served

A22. Legal and ethical practices, including standards for professional conduct,

patient rights, confidentiality, credentialing, and legislative and regulatory mandates A23. Principles and practices of effective supervision/mentoring of students, other professionals, and support personnel

Standard II-B: Prevention and Screening

Applicant has demonstrated knowledge of and skills in:

B1. Educating the public and those at risk on prevention, potential causes, effects, and treatment of congenital and acquired auditory and vestibular disorders B2. Establishing relationships with professionals and community groups to promote hearing wellness for all individuals across the life span

B3. Participating in programs designed to reduce the effects of noise exposure and agents that are toxic to the auditory and vestibular systems

B4. Utilizing instrument(s) (i.e. sound-level meter, dosimeter, etc.) to determine ambient noise levels and providing strategies for reducing noise and reverberation time in educational, occupational, and other settings

B5. Recognizing a concern on the part of medical providers, individuals, caregivers, or other professionals about hearing and/or speech-language problems and/or identifying people at risk to determine a need for hearing screening

B6. Conducting hearing screenings in accordance with established federal and state legislative and regulatory requirements

B7. Participating in occupational hearing conservation programs

B8. Performing developmentally, culturally, and linguistically appropriate hearing screening procedures across the life span

B9. Referring persons who fail the hearing screening for appropriate audiologic/medical evaluation

B10. Identifying persons at risk for speech-language and/or cognitive disorders that may interfere with communication, health, education, and/or psychosocial function B11. Screening for comprehension and production of language, including the cognitive and social aspects of communication

B12. Screening for speech production skills (e.g., articulation, fluency, resonance, and voice characteristics)

B13. Referring persons who fail the screening for appropriate speech-language pathology consults, medical evaluation, and/or services, as appropriate B14. Evaluating the success of screening and prevention programs through the use of performance measures (i.e., test sensitivity, specificity, and positive predictive value)

Standard II-C: Audiologic Evaluation

Applicant has demonstrated knowledge of and skills in:

C1. Gathering, reviewing, and evaluating information from referral sources to facilitate assessment, planning, and identification of potential etiologic factors C2. Obtaining a case history and client/patient narrative

C3. Obtaining client/patient-reported and/or caregiver-reported measures to assess function

C4. Identifying, describing, and differentiating among disorders of the peripheral and central auditory systems and the vestibular system

C5. Providing assessments of tinnitus severity and its impact on patients' activities of daily living and quality of life

C6. Providing assessment of tolerance problems to determine the presence of hyperacusis

C7. Selecting, performing, and interpreting a complete immittance test battery based on patient need and other findings; tests to be considered include single probe tone tympanometry or multifrequency and multicomponent protocols, ipsilateral and contralateral acoustic reflex threshold measurements, acoustic reflex decay measurements, and Eustachian tube function

C8. Selecting, performing, and interpreting developmentally appropriate behavioral pure-tone air and bone tests, including extended frequency range when indicated C9. Selecting, performing, and interpreting developmentally appropriate behavioral speech audiometry procedures to determine speech awareness threshold (SAT), speech recognition threshold (SRT), and word recognition scores (WRSs); obtaining a performance intensity function with standardized speech materials, when indicated

C10. Evaluating basic audiologic findings and client/patient needs to determine differential diagnosis and additional procedures to be used

C11. Selecting, performing, and interpreting physiologic and electrophysiologic test procedures, including electrocochleography, auditory brainstem response with frequency-specific air and bone conduction threshold testing, and click stimuli for neural diagnostic purposes

C12. Selecting, performing, and interpreting otoacoustic emissions testing

C13. Selecting, performing, and interpreting tests for nonorganic hearing loss

C14. Selecting, performing, and interpreting vestibular testing, including electronystagmography

(ENG)/videonystagmography (VNG), ocular vestibular-evoked myogenic potential (oVEMP), and cervical vestibular evoked myogenic potential (cVEMP) C15. Selecting, performing, and interpreting tests to evaluate central auditory processing disorder

Applicant has demonstrated knowledge of:

C16. Electrophysiologic testing, including but not limited to auditory steady-state response, auditory middle latency response, auditory late (long latency) response, and cognitive potentials (e.g., P300 response, mismatch negativity response) C17. Posturography

C18. Rotary chair tests

C19. Video head impulse testing (vHIT)

Standard II-D: Counseling

Applicant has demonstrated knowledge of and skills in:

D1. Identifying the counseling needs of individuals with hearing impairment based on their narratives and results of client/patient and/or caregiver responses to questionnaires and validation measures

D2. Providing individual, family, and group counseling as needed based on client/patient and clinical population needs

D3. Facilitating and enhancing clients'/patients' and their families' understanding of, acceptance of, and adjustment to auditory and vestibular disorders

D4. Enhancing clients'/patients' acceptance of and adjustment to hearing aids, hearing assistive technologies, and osseointegrated and other implantable devices D5. Addressing the specific interpersonal, psychosocial, educational, and vocational implications of hearing impairment for the client/patient, family members, and/or caregivers to enhance their well-being and quality of life

D6. Facilitating patients' acquisition of effective communication and coping skills D7. Promoting clients'/patients' self-efficacy beliefs and promoting self-management of communication and related adjustment problems

D8. Enhancing adherence to treatment plans and optimizing treatment outcomes D9. Monitoring and evaluating client/patient progress and modifying counseling goals and approaches, as needed

Standard II-E: Audiologic Rehabilitation Across the Life Span

Applicant has demonstrated knowledge of and skills in:

E1. Engaging clients/patients in the identification of their specific communication and adjustment difficulties by eliciting client/patient narratives and interpreting their and/or caregiver-reported measures

E2. Identifying the need for, and providing for assessment of, concomitant cognitive/developmental concerns, sensory-perceptual and motor skills, and other health/medical conditions, as well as participating in interprofessional collaboration to provide comprehensive management and monitoring of all relevant issues E3. Responding empathically to clients'/patients' and their families' concerns regarding communication and adjustment difficulties to establish a trusting therapeutic relationship

E4. Providing assessments of family members' perception of and reactions to communication difficulties

E5. Identifying the effects of hearing problems and subsequent communication difficulties on marital dyads, family dynamics, and other interpersonal communication functioning

E6. Engaging clients/patients (including, as appropriate, school-aged children/adolescents) and family members in shared decision making regarding treatment goals and options

E7. Developing and implementing individualized intervention plans based on clients'/patients' preferences, abilities, communication needs and problems, and

related adjustment difficulties

E8. Selecting and fitting appropriate amplification devices and assistive technologies E9. Defining appropriate electroacoustic characteristics of amplification fittings based on frequency-gain characteristics, maximum output sound-pressure level, and input-output characteristics

E10. Verifying that amplification devices meet quality control and American National Standards Institute (ANSI) standards

E11. Conducting real-ear measurements to (a) establish audibility, comfort, and tolerance of speech and sounds in the environment and (b) verify compression, directionality, and automatic noise management performance

E12. Incorporating sound field functional gain testing when fitting osseointegrated and other implantable devices

E13. Conducting individual and/or group hearing aid orientations to ensure that clients/patients can use, manage, and maintain their instruments appropriately E14. Identifying individuals who are candidates for cochlear implantation and other implantable devices

E15. Counseling cochlear implant candidates and their families regarding the benefits and limitations of cochlear implants to (a) identify and resolve concerns and potential misconceptions and (b) facilitate decision making regarding treatment options

E16. Providing programming and fitting adjustments; providing postfitting counseling for cochlear implant clients/patients

E17. Identifying the need for—and fitting—electroacoustically appropriate hearing assistive technology systems (HATS) based on clients'/patients' communication, educational, vocational, and social needs when conventional amplification is not indicated or provides limited benefit

E18. Providing HATS for those requiring access in public and private settings or for those requiring necessary accommodation in the work setting, in accordance with federal and state regulations

E19. Ensuring compatibility of HATS when used in conjunction with hearing aids, cochlear implants, or other devices and in different use environments

E20. Providing or referring for consulting services in the installation and operation of multi-user systems in a variety of environments (e.g., theaters, churches, schools) E21. Providing auditory, visual, and auditory-visual communication training (e.g., speechreading, auditory training, listening skills) to enhance receptive communication

E22. Counseling clients/patients regarding the audiologic significance of tinnitus and factors that cause or exacerbate tinnitus to resolve misconceptions and alleviate anxiety related to this auditory disorder

E23. Counseling clients/patients to promote the effective use of ear-level sound generators and/or the identification and use of situationally appropriate environmental sounds to minimize their perception of tinnitus in pertinent situations

E24. Counseling clients/patients to facilitate identification and adoption of effective coping strategies to reduce tinnitus-induced stress, concentration difficulties, and sleep disturbances

E25. Monitoring and assessing the use of ear-level and/or environmental sound generators and the use of adaptive coping strategies to ensure treatment benefit and successful outcome(s)

E26. Providing canalith repositioning for patients diagnosed with benign paroxysmal positional vertigo (BPPV)

E27. Providing intervention for central and peripheral vestibular deficits E28. Ensuring treatment benefit and satisfaction by monitoring progress and assessing treatment outcome

Standard II-F: Pediatric Audiologic (Re)habilitation

Applicant has demonstrated knowledge of and skills in:

F1. Counseling parents to facilitate their acceptance of and adjustment to a child's diagnosis of hearing impairment

F2. Counseling parents to resolve their concerns and facilitate their decision making regarding early intervention, amplification, education, and related intervention options for children with hearing impairment

F3. Educating parents regarding the potential effects of hearing impairment on speech-language, cognitive, and social-emotional development and functioning F4. Educating parents regarding optional and optimal modes of communication; educational laws and rights, including 504s, individualized education programs (IEPs), individual family service plans (IFSPs), individual health plans; and so forth F5. Selecting age/developmentally appropriate amplification devices and HATS to minimize auditory deprivation and maximize auditory stimulation

F6. Instructing parents and/or child(ren) regarding the daily use, care, and maintenance of amplification devices and HATS

F7. Planning and implementing parent education/support programs concerning the management of hearing impairment and subsequent communication and adjustment difficulties

F8. Providing for intervention to ensure age/developmentally appropriate speech and language development

F9. Administering self-assessment, parental, and educational assessments to monitor treatment benefit and outcome

F10. Providing ongoing support for children by participating in IEP or IFSP processes F11. Counseling the child with hearing impairment regarding peer pressure, stigma, and other issues related to psychosocial adjustment, behavioral coping strategies, and self-advocacy skills

F12. Evaluating acoustics of classroom settings and providing recommendations for modifications

F13. Providing interprofessional consultation and/or team management with speech-language pathologists, educators, and other related professionals

Standard III: Verification of Knowledge and Skills

Applicants for certification must have completed supervised clinical experiences under an ASHA-certified audiologist who has completed at least 2 hours of professional development in the area of clinical instruction/supervision. The experiences must meet CAA standards for duration and be sufficient to demonstrate the acquisition of the knowledge and skills identified in Standard II.

Implementation: The applicant's doctoral program director or designated signatory must verify that the applicant has acquired and demonstrated all of the knowledge and skills identified in Standard II.

Clinical instructors and supervisors must have:

- current CCC-A certification,
- a minimum of 9 full-time months of clinical experience after earning the CCC-A, and
- completed at least 2 hours of professional development (2 certification maintenance hours [CMHs], or 0.2 ASHA continuing education units [ASHA CEUs]) in the area of clinical instruction/supervision.

Clinical instruction and supervision within a doctoral program must:

- be conducted for a variety of clinical training experiences (i.e., different work settings and with different populations) to validate knowledge and skills across the scope of practice in audiology;
- include oversight of clinical and administrative activities directly related to client/patient care, including direct client/patient contact, consultation, recordkeeping, and administrative duties relevant to audiology service delivery;
- be appropriate to the student's level of training, education, experience, and competence;
- include direct observation, guidance, and feedback to permit the student to (a) monitor, evaluate, and improve performance and (b) develop clinical competence; and
- be provided on site.

Any portion of the applicant's supervised clinical experience that was not completed under an audiologist meeting the requirements above can be completed post-graduation. The applicant's post-graduation clinical instructor/ supervisor must also meet the above requirements will also verify that the applicant has demonstrated and acquired the knowledge and skills for ASHA certification following completion of the required supervised clinical experience.

Applicants who apply for certification without completing a full, supervised clinical experience under a clinical instructor/supervisor who meets the requirement above within their degree program will have 24 months from their application-received date to initiate the remainder of their experience and will have 48 months from the initiation date of their post-graduation supervised clinical experience to complete the experience.

If clinical instruction and supervision are completed post-graduation, they must comply with the requirements above with the exception of on-site clinical instruction and supervision. Remote supervision or telesupervision methods may be used, provided they are permitted by the employer(s) and by local, state, and federal regulations.

The supervised clinical experience should include interprofessional education and interprofessional collaborative practice (IPE/IPP). Under the supervision of their audiologist supervisor, students'/applicants' experience should include experiences with allied health professionals who are appropriately credentialed in their area of practice to enhance the student's knowledge and skills in an interdisciplinary, team–based, comprehensive health care delivery setting.

Standard IV: Examination

The applicant must pass the national examination adopted by ASHA for purposes of certification in audiology.

Implementation: Results of the Praxis Examination in Audiology must be submitted directly to ASHA from ETS. A passing exam score must be earned no earlier than 5 years prior to the submission of the application and no later than 2 years following receipt of the application. If the applicant does not successfully pass the exam and does not report the results of the exam to ASHA within the 2-year application period, then the applicant's certification file will be closed. If the applicant passes or reports the results of the exam at a later date, then the individual will be required to reapply for certification under the standards that are in effect at that time.

Standard V: Maintenance of Certification

Individuals holding certification must demonstrate (1) continuing professional development, including 1 hour of continuing education in ethics; (2) adherence to the ASHA Code of Ethics; and (3) payment of annual dues and fees.

Implementation: Individuals who hold the CCC in Audiology (CCC-A) must accumulate and report 30 CMHs (or 3.0 ASHA CEUs) of professional development, which must include 1 CMH (or 0.1 ASHA CEU) in ethics during every 3-year certification maintenance interval. Individuals will be subject to random audits of their professional development activities.

Individuals who hold the CCC-A must adhere to the ASHA *Code of Ethics* ("Code"). Any violation of the Code may result in professional discipline by the ASHA Board of Ethics and/or the CFCC.

Annual payment of certification dues and/or fees is also a requirement of certification maintenance. If certification maintenance requirements are not met, certification status will become Not Current, and then certification will expire. In order to regain certification, individuals must meet the reinstatement requirement that is in effect at the time they submit their reinstatement application.

Appendix F: Association Information

ASHA - The American Speech-Language-Hearing Association

ASHA is the national scientific and professional association for speech-language pathologists, audiologists, and speech-language and hearing scientists concerned with communication behavior and disorders. ASHA also accredits our graduate programs in Speech-Language Pathology and Audiology. We urge you to become familiar with its goals, its programs, and its publications. You will learn about ASHA in your coursework, from your clinical preceptors, and from publications that will be made available to you at various times.

The manner in which you receive your clinical training follows certain guidelines prescribed by ASHA. The guidelines call for a minimum number of clinical clock hours of experience in and require supervised clinical experiences. <u>However, it is the philosophy of our program that merely meeting minimum requirements does not necessarily mean that you have received adequate practicum experience.</u> Our objective is to provide students with the number and quality of clinical experiences that will make them competent professionals. Meeting competency requirements often means that students will accumulate academic and clinical experiences in excess of the ASHA minimum requirements. More information regarding ASHA can be found at www.asha.org

NSSLHA - The National Student Speech-Language and Hearing Association

NSSLHA is the national organization for students interested in the study of normal and disordered communication behavior. Membership is open to undergraduate graduate students. Many universities, including CU, maintain active chapters, which meet during the year on a regular basis. The CU Chapter of NSSLHA encourages your membership and support of its activities. Through CU Chapter programs, you will learn more about the opportunities that can result from your professional training, more about the national NSSLHA Chapter, and about the workings of the ASHA. More information regarding NSSLHA can be found at http://www.nsslha.org/default.htm

SAA - CU Student Academy of Audiology

SAA is the student division of the American Academy of Audiology. Learn more about SAA here: <u>http://www.audiology.org/SAA/aboutus/Pages/default.aspx</u>. CU-Boulder's SAA Chapter has a bulletin board on SLHS' 2nd floor (north hallway) where meeting information, activities, and contact information for officers is located.

CAA - Colorado Academy of Audiology

CAA is the state organization for individuals working or interested in the field of audiology. Membership is open to undergraduate, masters and doctoral level graduate students. CAA encourages you to become a member and participate in its activities. Through involvement in CAA you will learn more about the opportunities available in Indiana. More information regarding CAA can be found at https://coaudiology.org/

AAA – American Academy of Audiology

AAA is the professional organization for audiologists. Student membership allows you to receive JAAA, the Journal of the American Academy of Audiology and Audiology Today. The annual convention is a site for clinical presentations, new amplification products and job opportunities. More information regarding AAA can be found at www.audiology.org.

ASA – Acoustical Society of America

ASA is the professional organization for acousticians, engineers, psychoacousticians and hearing scientists. Like ARO, this organization is also a research organization suited for students interested in a career in hearing research, particularly psychoacoustics. More information regarding ASA can be found at http://asa.aip.org/

Appendix G: Course Schedule

Course Schedule: The following is a typical course schedule for the AuD program. Note that changes may occur due to faculty availability.

Year 1 Fall:

Course #	Course Title	Credit Hours
SLHS 5576	Communication Neuroscience	3
SLHS 5918	Audiology Clinical Practica: Level 1	1
SLHS 6544	Auditory Processes: Adult Assessment	3
SLHS 6006	Advanced Hearing Science	3
SLHS 6564	Auditory Processes: Neurodiagnostics	3

Year 1 Spring:

Course #	Course Title	Credit Hours
SLHS 5918	Audiology Clinical Practica: Level 1	1
SLHS 6614	Fundamentals of Amplification	3
SLHS 6554	Auditory Processes: Child Assessment	3
SLHS 7000	Research Designs in Human Communication	
	Sciences and Disorders	3

Year 2 Summer:

Course #	Course Title	Credit Hours
SLHS 5928	Audiology Clinical Practica: Level 1	1

Year 2&3 Fall (Even Years: 2016-17, 2018--19):

Course #	Course Title C	<u>redit Hours</u>
SLHS 5674	Signals and Systems	3
SLHS 6670	Adult Aural Rehabilitation	3
SLHS 7614	Implantable Devices: Technology and Clinical Applica	tion 3
SLHS 5928	Audiology Clinical Practica: Level 1 (2nd year student	s) 2
SLHS 5938/5948Audiology Clinical Practica: Level 2 (3rd year students)		

Year 2&3 Spring (Even Years: 2016-17, 2018--19):

Course #	Course Title	<u>Credit Hours</u>
SLHS 7540	Auditory Processes: Physiology, Assessment,	
	and Management of the Vestibular System	3
SLHS 7714	Advanced Topics in Amplification	3
SLHS 5928	Audiology Clinical Practica: Level 1 (second year studer	nts) 2
SLHS 5938/5	948Audiology Clinical Practica: Level 2 (third year studer	nts) 4
SLHS 7450	Audiology Capstone Project (all students)	3

Year 2&3 Summer (Even Years: 2016-17, 2018--19):

Course #	Course Title	<u>Credit Hours</u>
SLHS 5938	Audiology Clinical Practica: Level 2 (third year students)) 4
SLHS 6938	Audiology Clinical Externship	4

Year 2&3 Fall (Odd Years: 2017-2018, 2019-20):

Course #	Course Title	Credit Hours
SLHS 7640	Communication Processes and Hearing Loss:	
	Birth through Six	3
SLHS 7530	Auditory Processes: Theory and Application	
	in School Environment	3
SLHS 7520	Auditory Processes: Medical and Genetic Bases	3
SLHS 5928	Audiology Clinical Practica: Level 1 (second year stude	ents) 2
SLHS 5938/5948Audiology Clinical Practica: Level 2 (third year students) 4		

Year 2&3 Spring (Odd Years: 2017-2018, 2019-20):

Course #	Course Title	Credit Hours
SLHS 7550	Management and Prevention of Noise and	
	Noise Induced Hearing Loss	2
SLHS 7200	Business, Management & Ethics in Audiology	3
SLHS 5928	Audiology Clinical Practica: Level 1 (second year stude	nts) 2
SLHS 5938/5948Audiology Clinical Practica: Level 2 (third year students)		ents) 4
SLHS 7554	Instrumentation and Calibration in Audiology	1
SLHS 6650	Counseling and Professional Ethics	2
SLHS 6660	Multicultural Issues in SLHS and its Disorders	1

Year 2&3 Summer (Odd Years: 2017-2018, 2019-20):			
SLHS 5948	Audiology Clinical Practica: Level 2 (third year students)) 4	
SLHS 6948	Audiology Clinical Externship	4	
<u>Year 4:</u>			
Fall:			
Course #	Course Title	<u>Credit Hours</u>	
SLHS 6938/6	948 Audiology Clinical Externship	4	
Spring:			
Course #	Course Title	Credit Hours	
SLHS 6938/6	948 Audiology Clinical Externship	5	