AMERICAN
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AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

Scope of Practice in Speech-Language Pathology

Ad Hoc Committee on the Scope of Practice in Speech-Language Pathology

About This Document

This scope of practice document is an official policy of the American Speech-Language-Hearing Association (ASHA) defining the breadth of practice within the profession of speech-language pathology. This document was developed by the ASHA Ad Hoc Committee on the Scope of Practice in Speech-Language Pathology. Committee members were Kenn Apel (chair), Theresa E. Bartolotta, Adam A. Brickell, Lynne E. Hewitt, Ann W. Kummer, Luis F. Riquelme, Jennifer B. Watson, Carole Zangari, Brian B. Shulman (vice president for professional practices in speech-language pathology), Lemmietta McNeilly (ex officio), and Diane R. Paul (consultant). This document was approved by the ASHA Legislative Council on September 4, 2007 (LC 09-07). ****

Introduction

The Scope of Practice in Speech-Language Pathology includes a statement of purpose, a framework for research and clinical practice, qualifications of the speech-language pathologist, professional roles and activities, and practice settings. The speech-language pathologist is the professional who engages in clinical services, prevention, advocacy, education, administration, and research in the areas of communication and swallowing across the life span from infancy through geriatrics. Given the diversity of the client population, ASHA policy requires that these activities are conducted in a manner that takes into consideration the impact of culture and linguistic exposure/acquisition and uses the best available evidence for practice to ensure optimal outcomes for persons with communication and/or swallowing disorders or differences.

As part of the review process for updating the Scope of Practice in Speech-Language Pathology, the committee made changes to the previous scope of practice document that reflected recent advances in knowledge, understanding, and research in the discipline. These changes included acknowledging roles and responsibilities that were not mentioned in previous iterations of the Scope of Practice (e.g., funding issues, marketing of services, focus on emergency responsiveness, communication wellness). The revised document also was framed squarely on two guiding principles: evidence-based practice and cultural and linguistic diversity.

Statement of Purpose

The purpose of this document is to define the Scope of Practice in Speech-Language Pathology to

1. delineate areas of professional practice for speech-language pathologists;
2. inform others (e.g., health care providers, educators, other professionals, consumers, payers, regulators, members of the general public) about professional services offered by speech-language pathologists as qualified providers;
3. support speech-language pathologists in the provision of high-quality, evidence-based services to individuals with concerns about communication or swallowing;
4. support speech-language pathologists in the conduct of research;
5. provide guidance for educational preparation and professional development of speech-language pathologists.

This document describes the breadth of professional practice offered within the profession of speech-language pathology. Levels of education, experience, skill, and proficiency with respect to the roles and activities identified within this scope of practice document vary among individual providers. A speech-language pathologist typically does not practice in all areas of the field. As the ASHA Code of Ethics specifies, individuals may practice only in areas in which they are competent (i.e., individuals' scope of competency), based on their education, training, and experience.

In addition to this scope of practice document, other ASHA documents provide more specific guidance for practice areas. Figure 1 illustrates the relationship between the ASHA Code of Ethics, the Scope of Practice, and specific practice documents. As shown, the ASHA Code of Ethics sets forth the fundamental principles and rules considered essential to the preservation of the highest standards of integrity and ethical conduct in the practice of speech-language pathology.

Speech-language pathology is a dynamic and continuously developing profession. As such, listing specific areas within this Scope of Practice does not exclude emerging areas of practice. Further, speech-language pathologists may provide additional professional services (e.g., interdisciplinary work in a health care setting, collaborative service delivery in schools, transdisciplinary practice in

early intervention settings) that are necessary for the well-being of the individual(s) they are serving but are not addressed in this Scope of Practice. In such instances, it is both ethically and legally incumbent upon professionals to determine whether they have the knowledge and skills necessary to perform such services.

This scope of practice document 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.

Framework for Research and Clinical Practice

The overall objective of speech-language pathology services is to optimize individuals' ability to communicate and swallow, thereby improving quality of life. As the population profile of the United States continues to become increasingly diverse (U.S. Census Bureau, 2005), speech-language pathologists have a responsibility to be knowledgeable about the impact of these changes on clinical services and research needs. Speech-language pathologists are committed to the provision of culturally and linguistically appropriate services and to the consideration of diversity in scientific investigations of human communication and swallowing. For example, one aspect of providing culturally and linguistically appropriate services is to determine whether communication difficulties experienced by English language learners are the result of a communication disorder in the native language or a consequence of learning a new language.

Additionally, an important characteristic of the practice of speech-language pathology is that, to the extent possible, clinical decisions are based on best available evidence. ASHA has defined evidence-based practice in speech-language pathology as an approach in which current, high-quality research evidence is integrated with practitioner expertise and the individual's preferences and values into the process of clinical decision making (ASHA, 2005). A high-quality basic, applied, and efficacy research base in communication sciences and disorders and related fields of study is essential to providing evidence-based clinical practice and quality clinical services. The research base can be enhanced by increased interaction and communication with researchers across the United States and from other countries. As our global society is becoming more connected, integrated, and interdependent, speech-language pathologists have access to an abundant array of resources, information technology, and diverse perspectives and influence (e.g., Lombardo, 1997). Increased national and international interchange of professional knowledge, information, and education in communication sciences and disorders can be a means to strengthen research collaboration and improve clinical services.

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 breadth of the role of the speech-language pathologist in the prevention, assessment, and habilitation/ rehabilitation, enhancement, and scientific investigation of communication and swallowing. It consists of two components:

- Health Conditions
    - º Body Functions and Structures: These involve the anatomy and physiology of the human body. Relevant examples in speech-language pathology include craniofacial anomaly, vocal fold paralysis, cerebral palsy, stuttering, and language impairment.
    - º Activity and Participation: Activity refers to the execution of a task or action. Participation is the involvement in a life situation. Relevant examples in speech-language pathology include difficulties with swallowing safely for independent feeding, participating actively in class, understanding a medical prescription, and accessing the general education curriculum.
- Contextual Factors
    - º Environmental Factors: These make up the physical, social, and attitudinal environments in which people live and conduct their lives. Relevant examples in speech-language pathology include the role of the communication partner in augmentative and alternative communication, the influence of classroom acoustics on communication, and the impact of institutional dining environments on individuals' ability to safely maintain nutrition and hydration.
    - º Personal Factors: These are the internal influences on an individual's functioning and disability and are not part of the health condition. These factors may include, but are not limited to, age, gender, ethnicity, educational level, social background, and profession. Relevant examples in speech-language pathology might include a person's background or culture that influences his or her reaction to a communication or swallowing disorder.

The framework in speech-language pathology encompasses these health conditions and contextual factors. The health condition component of the ICF can be expressed on a continuum of functioning. On one end of the continuum is intact functioning. At the opposite end of the continuum is completely compromised functioning. The contextual factors interact with each other and with the health conditions and may serve as facilitators or barriers to functioning. Speech-language pathologists may influence contextual factors through education and advocacy efforts at local, state, and national levels. Relevant examples in speech-language pathology include a user of an augmentative communication device needing classroom support services for academic success, or the effects of premorbid literacy level on rehabilitation in an adult post brain injury. Speech-language pathologists work to improve quality of life

by reducing impairments of body functions and structures, activity limitations, participation restrictions, and barriers created by contextual factors.

Qualifications

Speech-language pathologists, as defined by ASHA, hold the ASHA Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP), which requires a master's, doctoral, or other recognized post-baccalaureate degree. ASHA-certified speech-language pathologists complete a supervised postgraduate professional experience and pass a national examination as described in the ASHA certification standards. Demonstration of continued professional development is mandated for the maintenance of the CCC-SLP. Where applicable, speech-language pathologists hold other required credentials (e.g., state licensure, teaching certification).

This document defines the scope of practice for the field of speech-language pathology. Each practitioner must evaluate his or her own experiences with preservice education, clinical practice, mentorship and supervision, and continuing professional development. As a whole, these experiences define the scope of competence for each individual. Speech-language pathologists may engage in only those aspects of the profession that are within their scope of competence.

As primary care providers for communication and swallowing disorders, speech-language pathologists are autonomous professionals; that is, their services are not prescribed or supervised by another professional. However, individuals frequently benefit from services that include speech-language pathologist collaborations with other professionals.

Professional Roles and Activities

Speech-language pathologists serve individuals, families, and groups from diverse linguistic and cultural backgrounds. Services are provided based on applying the best available research evidence, using expert clinical judgments, and considering clients' individual preferences and values. Speech-language pathologists address typical and atypical communication and swallowing in the following areas:

- **speech sound production**
  - articulation
  - apraxia of speech
  - dysarthria
  - ataxia
  - dyskinesia
- **resonance**
  - hypernasality
  - hyponasality
  - cul-de-sac resonance
  - mixed resonance
- **voice**
  - phonation quality
  - pitch
  - loudness
  - respiration
- **fluency**
  - stuttering
  - cluttering
- **language** (comprehension and expression)
  - phonology
  - morphology
  - syntax
  - semantics
  - pragmatics (language use, social aspects of communication)
  - literacy (reading, writing, spelling)
  - prelinguistic communication (e.g., joint attention, intentionality, communicative signaling)
  - paralinguistic communication
- **cognition**
  - attention
  - memory
  - sequencing
  - problem solving
  - executive functioning

- **feeding and swallowing**
    - oral, pharyngeal, laryngeal, esophageal
    - orofacial myology (including tongue thrust)
    - oral-motor functions

Potential etiologies of communication and swallowing disorders include

- neonatal problems (e.g., prematurity, low birth weight, substance exposure);
- developmental disabilities (e.g., specific language impairment, autism spectrum disorder, dyslexia, learning disabilities, attention deficit disorder);
- auditory problems (e.g., hearing loss or deafness);
- oral anomalies (e.g., cleft lip/palate, dental malocclusion, macroglossia, oral-motor dysfunction);
- respiratory compromise (e.g., bronchopulmonary dysplasia, chronic obstructive pulmonary disease);
- pharyngeal anomalies (e.g., upper airway obstruction, velopharyngeal insufficiency/incompetence);
- laryngeal anomalies (e.g., vocal fold pathology, tracheal stenosis, tracheostomy);
- neurological disease/dysfunction (e.g., traumatic brain injury, cerebral palsy, cerebral vascular accident, dementia, Parkinson's disease, amyotrophic lateral sclerosis);
- psychiatric disorder (e.g., psychosis, schizophrenia);
- genetic disorders (e.g., Down syndrome, fragile X syndrome, Rett syndrome, velocardiofacial syndrome).

The professional roles and activities in speech-language pathology include clinical/ educational services (diagnosis, assessment, planning, and treatment), prevention and advocacy, and education, administration, and research.

Clinical Services

Speech-language pathologists provide clinical services that include the following:

- prevention and pre-referral
- screening
- assessment/evaluation
- consultation
- diagnosis
- treatment, intervention, management
- counseling
- collaboration
- documentation
- referral

Examples of these clinical services include

1. using data to guide clinical decision making and determine the effectiveness of services;
2. making service delivery decisions (e.g., admission/eligibility, frequency, duration, location, discharge/dismissal) across the lifespan;
3. determining appropriate context(s) for service delivery (e.g., home, school, telepractice, community);
4. documenting provision of services in accordance with accepted procedures appropriate for the practice setting;
5. collaborating with other professionals (e.g., identifying neonates and infants at risk for hearing loss, participating in palliative care teams, planning lessons with educators, serving on student assistance teams);
6. screening individuals for hearing loss or middle ear pathology using conventional pure-tone air conduction methods (including otoscopic inspection), otoacoustic emissions screening, and/or screening tympanometry;
7. providing intervention and support services for children and adults diagnosed with speech and language disorders;
8. providing intervention and support services for children and adults diagnosed with auditory processing disorders;
9. using instrumentation (e.g., videofluoroscopy, electromyography, nasendoscopy, stroboscopy, endoscopy, nasometry, computer technology) to observe, collect data, and measure parameters of communication and swallowing or other upper aerodigestive functions;
10. counseling individuals, families, coworkers, educators, and other persons in the community regarding acceptance, adaptation, and decision making about communication and swallowing;
11. facilitating the process of obtaining funding for equipment and services related to difficulties with communication and swallowing;
12. serving as case managers, service delivery coordinators, and members of collaborative teams (e.g., individualized family service plan and individualized education program teams, transition planning teams);
13. providing referrals and information to other professionals, agencies, and/or consumer organizations;

14. developing, selecting, and prescribing multimodal augmentative and alternative communication systems, including unaided strategies (e.g., manual signs, gestures) and aided strategies (e.g., speech-generating devices, manual communication boards, picture schedules);
15. providing services to individuals with hearing loss and their families/ caregivers (e.g., auditory training for children with cochlear implants and hearing aids; speech reading; speech and language intervention secondary to hearing loss; visual inspection and listening checks of amplification devices for the purpose of troubleshooting, including verification of appropriate battery voltage);
16. addressing behaviors (e.g., perseverative or disruptive actions) and environments (e.g., classroom seating, positioning for swallowing safety or attention, communication opportunities) that affect communication and swallowing;
17. selecting, fitting, and establishing effective use of prosthetic/adaptive devices for communication and swallowing (e.g., tracheoesophageal prostheses, speaking valves, electrolarynges; this service does not include the selection or fitting of sensory devices used by individuals with hearing loss or other auditory perceptual deficits, which falls within the scope of practice of audiologists; ASHA, 2004);
18. providing services to modify or enhance communication performance (e.g., accent modification, transgender voice, care and improvement of the professional voice, personal/professional communication effectiveness).

Prevention and Advocacy

Speech-language pathologists engage in prevention and advocacy activities related to human communication and swallowing.

Example activities include

1. improving communication wellness by promoting healthy lifestyle practices that can help prevent communication and swallowing disorders (e.g., cessation of smoking, wearing helmets when bike riding);
2. presenting primary prevention information to individuals and groups known to be at risk for communication disorders and other appropriate groups;
3. providing early identification and early intervention services for communication disorders;
4. advocating for individuals and families through community awareness, health literacy, education, and training programs to promote and facilitate access to full participation in communication, including the elimination of societal, cultural, and linguistic barriers;
5. advising regulatory and legislative agencies on emergency responsiveness to individuals who have communication and swallowing disorders or difficulties;
6. promoting and marketing professional services;
7. advocating at the local, state, and national levels for improved administrative and governmental policies affecting access to services for communication and swallowing;
8. advocating at the local, state, and national levels for funding for research;
9. recruiting potential speech-language pathologists into the profession;
10. participating actively in professional organizations to contribute to best practices in the profession.

Education, Administration, and Research

Speech-language pathologists also serve as educators, administrators, and researchers. Example activities for these roles include

1. educating the public regarding communication and swallowing;
2. educating and providing in-service training to families, caregivers, and other professionals;
3. educating, supervising, and mentoring current and future speech-language pathologists;
4. educating, supervising, and managing speech-language pathology assistants and other support personnel;
5. fostering public awareness of communication and swallowing disorders and their treatment;
6. serving as expert witnesses;
7. administering and managing clinical and academic programs;
8. developing policies, operational procedures, and professional standards;
9. conducting basic and applied/translational research related to communication sciences and disorders, and swallowing.

Practice Settings

Speech-language pathologists provide services in a wide variety of settings, which may include but are not exclusive to

1. public and private schools;
2. early intervention settings, preschools, and day care centers;
3. health care settings (e.g., hospitals, medical rehabilitation facilities, long-term care facilities, home health agencies, clinics, neonatal intensive care units, behavioral/mental health facilities);
4. private practice settings;
5. universities and university clinics;
6. individuals' homes and community residences;
7. supported and competitive employment settings;

8. community, state, and federal agencies and institutions;
9. correctional institutions;
10. research facilities;
11. corporate and industrial settings.

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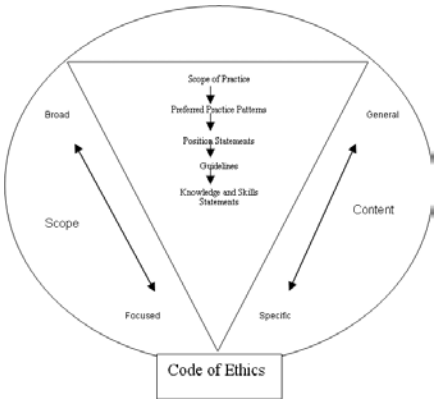

Figure 1. Conceptual Framework of ASHA Practice Documents

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Background Information and Standards and Implementation for the Certificate of Clinical Competence

in Speech Language Pathology

(Updated 7/1/05)

Background Information

The Council on Professional Standards in Speech-Language Pathology and Audiology (Standards Council) of the American Speech-Language-Hearing Association (ASHA), which was sunset in December 2000, was responsible for developing the standards for clinical certification and for monitoring those standards. That is, the Standards Council developed new standards in response to changes in the scope of practice, to protect consumers and to promote quality services. In January 2001 the Council For Clinical Certification (CFCC) was established and assumed both the standard-setting and implementation functions. After finalization of the standards, the CFCC began the development of the implementation language, which clarifies or interprets the standards.

The Standards Council had developed an action plan to identify the "…academic, clinical, and other experiences required for attaining the critical knowledge and skills necessary for entry-level, independent practice of speech- language pathology." As a part of that plan, ASHA commissioned the Educational Testing Service to conduct a skills validation study for the profession of speech-language pathology, and the Standards Council examined information from the following: the skills validation study; practice-specific literature (e.g., scope of practice statements, position papers, preferred practice patterns, and publications of related professional organizations); national examination results; information obtained from focus group discussions of the future of speech- language pathology (Practice Setting Panel, ASHA Leadership Conference, Multicultural Issues Board, and the Board of Division Coordinators); a review of external factors (e.g., demographic factors, changes in health care and public education service delivery systems, reimbursement changes in health care and public education service delivery systems, reimbursement regulations, state regulations, and legal issues); consumer groups; and widespread peer review from the ASHA membership, the ASHA leadership, state licensure boards, academic programs, related professional organizations, and consumer groups.
Following a review of the data noted above, the Standards Council published proposed standards for widespread peer review in 1999. The proposed standards were modified on the basis of the peer review comments and adopted by the Standards Council in October 2000, to be implemented in 2005.

Overview of Standards

Although previous certification standards emphasized process measures of academic and clinical knowledge, the 2005 standards combine process and outcome measures of academic and clinical knowledge and skills. Process standards specify the experiences, such as course work or practicum hours; outcome standards require demonstration of specific knowledge and skills. The 2005 standards utilize a combination of formative and summative assessments for the purpose of improving and measuring student learning.
Salient features of the standards for entry- level practice include the following requirements:

A. A minimum of 75 semester credit hours culminating in a master’s, doctoral, or other recognized post-baccalaureate degree. The graduate education in speech-language pathology must be initiated and completed in a program accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.

B. Skills in oral and written communication and demonstrated knowledge of ethical standards, research principles, and current professional and regulatory issues.

C. Practicum experiences that encompass the breadth of the current scope of practice with both adults and children (with no specific clock-hour requirements for given disorders or settings) resulting in a minimum of 400 clock hours of supervised practicum, of which at least 375 hours must be in direct client/patient contact and 25 in clinical observation.

D. A 36-week speech- language pathology clinical fellowship that establishes a collaboration between the clinical fellow and a mentor.

E. A maintenance of certification requirement (Standard VII) that went into effect on January 1, 2005.

Standards and Implementation for the Certificate of Clinical Competence in Speech-Language Pathology

Effective January 1, 2005

Applicants for Initial Certification Under the 1993 Standards

Individuals must apply for initial certification on or before December 31, 2005, in order to be evaluated under the 1993 standards.

Applicants for Initial Certification Under the 2005 Standards

Individuals may apply for initial certification on or after January 1, 2005, in order to be evaluated under the 2005 standards. Individuals applying for initial certification after January 1, 2006, will be evaluated under the 2005 standards.

Applicants for Reinstatement Under the 1993 Standards

Individuals must apply for reinstatement on or before December 31, 2005, in order to be evaluated under the 1993 Certification Standards. The reinstatement policy under the 1993 Certification Standards is as follows:

- If lapsed less than 5 years: Submit a reinstatement application form and the appropriate fee.
- If lapsed more than 5 years: Submit an application for certification with the appropriate fee and either (a) obtain a passing score on the Praxis Series examination within the 3 years preceding application or (b) meet the 1993 certification standards.

Applicants for Reinstatement Under the 2005 Standards

Individuals who apply for reinstatement on or after January 1, 2006, cannot be evaluated under the 1993 Certification Standards and must meet the 2005 Certification Standards. The reinstatement policy under the 2005 Certification Standards is as follows:

- If lapsed less than 5 years: Submit a reinstatement application form, the reinstatement fee, and evidence of professional development hours based on the number of years lapsed (i.e., 1 year = 10 hours; 2 years = 20 hours; 3-5 years = 30 hours).
- If lapsed more than 5 years: Submit a new application for certification with the appropriate fee, obtain a passing score on the Praxis Series examination within 5 years of application for reinstatement, complete a modified clinical fellowship (12-weeks duration), and accumulate 30 contact hours of professional development for the 3 years prior to the application for reinstatement.

STANDARD I: DEGREE

Effective January 1, 2005, the applicant for certification must have a master's or doctoral or other recognized post-baccalaureate degree. A minimum of 75 semester credit hours must be completed in a course of study addressing the knowledge and skills pertinent to the field of speech-language pathology.

Implementation:
Verification of the graduate degree is required of the applicant before the certificate is awarded. Degree verification is accomplished by submitting (a) an application signed by the director of the graduate program indicating the degree date, and (b) an official transcript showing that the degree has been awarded. Individuals educated in foreign countries must submit official transcripts and evaluations of their degrees and courses to verify equivalency.

All graduate course work and graduate clinical practicum required in the professional area for which the Certificate is sought must have been initiated and completed at an institution whose program was accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association in the area for which the Certificate is sought.

Automatic Approval. If the graduate program of study is initiated and completed in a CAA-accredited program and if the program director or official designee verifies that all knowledge and skills requirements have been met, approval of the application is automatic provided that the application for the Certificate of Clinical Competence is received by the National Office no more than 3 years after the degree is awarded.

Evaluation Required. The following categories of applicants must submit a completed application for certification that includes the Knowledge and Skills Acquisition (KASA) summary form for evaluation by the Council For Clinical Certification (CFCC):
(a) those who apply more than 3 years after the completion of the graduate degree from a CAA-accredited program
(b) those who were graduate students and were continuously enrolled in a CAA-program that had its accreditation withdrawn during the applicant's enrollment
(c) those who satisfactorily completed graduate course work, clinical practicum, and knowledge and skills requirements in the area for which certification is sought in a program that held candidacy status for accreditation
(d) those who satisfactorily completed graduate course work, clinical practicum, and knowledge and skills requirements in speech-language pathology at a CAA-accredited program but (1) received a graduate degree from a program not accredited by CAA, (2) received a graduate degree in a related area, or (3) received a graduate degree from a non-U.S. institution of higher education.
The graduate program director must verify satisfactory completion of both undergraduate and graduate academic course work, clinical practicum, and knowledge and skills requirements.

STANDARD II: INSTITUTION OF HIGHER EDUCATION
The graduate degree must be granted by a regionally accredited institution of higher education.
Implementation:
The institution of higher education must be accredited by one of the following: Commission on Higher Education, Middle States Association of Colleges and Schools; Commission on Institutions of Higher Education, New England Association of Schools and Colleges; Commission on Institutions of Higher Education, North Central Association of Colleges and Schools; Commission on Colleges, Northwest Association of Schools and Colleges; Commission on Colleges, Southern Association of Colleges and Schools; or Accrediting Commission for Senior Colleges and Universities, Western Association of Schools and Colleges.
Individuals educated in foreign countries must submit documentation that course work was completed in an institution of higher education that is regionally accredited or recognized by the appropriate regulatory authority for that country. In addition, applicants educated in foreign countries must meet each of the Standards that follow.

STANDARD III: PROGRAM OF STUDY—KNOWLEDGE OUTCOMES

The applicant for certification must complete a program of study (a minimum of 75 semester credit hours overall, including at least 36 at the graduate level) that includes academic course work sufficient in depth and breadth to achieve the specified knowledge outcomes.

Implementation:

The program of study must address the knowledge and skills pertinent to the field of speech-language pathology. The applicant must maintain documentation of course work at both undergraduate and graduate levels demonstrating that the requirements in this standard have been met. The minimum 75 semester credit hours may include credit earned for course work, clinical practicum, research, and/or thesis/dissertation. Verification is accomplished by submitting an official transcript showing that the minimum credit hours have been completed.

Standard III-A: The applicant must demonstrate knowledge of the principles of biological sciences, physical sciences, mathematics, and the social/behavioral sciences.

Implementation:

The applicant must have transcript credit (which could include course work, advanced placement, CLEP, or examination of equivalency) for each of the following areas: biological sciences, physical sciences, social/behavioral sciences, and mathematics. Appropriate course work may include human anatomy and physiology, neuroanatomy and neurophysiology, genetics, physics, inorganic and organic chemistry, psychology, sociology, anthropology, and non-remedial mathematics. The intent of this standard is to require students to have a broad liberal arts and science background. Courses in biological and physical sciences specifically related to communication sciences and disorders (CSD) may not be applied for certification purposes in this category. In addition to transcript credit, applicants may be required by their graduate program to provide further evidence of meeting this requirement.

Standard III-B: The applicant must demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases.

Implementation:

This standard emphasizes the basic human communication processes. The applicant must demonstrate the ability to integrate information pertaining to normal and abnormal human development across the life span, including basic communication processes and the impact of cultural and linguistic diversity on communication. Similar knowledge must also be obtained in swallowing processes and new emerging areas of practice. Program documentation may include transcript credit and information obtained by the applicant through clinical experiences, independent studies, and research projects.

Standard III-C: The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including the etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates. Specific knowledge must be demonstrated in the following areas:

- **articulation**
- **fluency**
- **voice and resonance, including respiration and phonation**
- **receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities**
- **hearing, including the impact on speech and language**
- **swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding; orofacial myofunction)**

- **cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning)**
- **social aspects of communication (including challenging behavior, ineffective social skills, lack of communication opportunities)**
- **communication modalities (including oral, manual, augmentative, and alternative communication techniques and assistive technologies)**

Implementation:
The applicant must demonstrate the ability to integrate information delineated in this standard. Program documentation may include transcript credit and information obtained by the applicant through clinical experiences, independent studies, and research projects. It is expected that course work addressing the professional knowledge specified in Standard III-C will occur primarily at the graduate level. The knowledge gained from the graduate program should include an effective balance between traditional parameters of communication (articulation/phonology, voice, fluency, language, and hearing) and additional recognized and emerging areas of practice (e.g., swallowing, upper aerodigestive functions).

Standard III-D: The applicant must possess knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates of the disorders.
Implementation:
The applicant must demonstrate the ability to integrate information about prevention, assessment, and intervention over the range of differences and disorders specified in Standard III-C above. Program documentation may include transcript credit and information obtained by the applicant through clinical experiences, independent studies, and research projects.

Standard III-E: The applicant must demonstrate knowledge of standards of ethical conduct.
Implementation:
The applicant must demonstrate knowledge of, appreciation for, and ability to interpret the ASHA Code of Ethics. Program documentation may reflect course work, workshop participation, instructional module, clinical experiences, and independent projects.

Standard III-F: The applicant must demonstrate knowledge of processes used in research and the integration of research principles into evidence-based clinical practice.
Implementation:
The applicant must demonstrate comprehension of the principles of basic and applied research and research design. In addition the applicant should know how to access sources of research information and have experience relating research to clinical practice. Program documentation could include information obtained through class projects, clinical experiences, independent studies, and research projects.

Standard III-G: The applicant must demonstrate knowledge of contemporary professional issues.
Implementation:
The applicant must demonstrate knowledge of professional issues that affect speech-language pathology as a profession. Issues typically include professional practice, academic program accreditation standards, ASHA practice policies and guidelines, and reimbursement procedures. Documentation could include information obtained through clinical experiences, workshops, and independent studies.

Standard III-H: The applicant must demonstrate knowledge about certification, specialty recognition, licensure, and other relevant professional credentials.

Implementation:
The applicant must demonstrate knowledge of state and federal regulations and policies related to the practice of speech-language pathology and credentials for professional practice. Documentation could include course modules and instructional workshops.

STANDARD IV: PROGRAM OF STUDY—SKILLS OUTCOMES

Standard IV-A: The applicant must complete a curriculum of academic and clinical education that follows an appropriate sequence of learning sufficient to achieve the skills outcomes in Standard IV-G.

Implementation:
The applicant's program of study should follow a systematic knowledge- and skill-building sequence in which basic course work and practicum precede, insofar as possible, more advanced course work and practicum.

Standard IV-B: The applicant must possess skill in oral and written or other forms of communication sufficient for entry into professional practice.

Implementation:
The applicant must demonstrate communication skills sufficient to achieve effective clinical and professional interaction with clients/patients and relevant others. For oral communication, the applicant must demonstrate speech and language skills in English, which, at a minimum, are consistent with ASHA's most current position statement on students and professionals who speak English with accents and nonstandard dialects. For written communication, the applicant must be able to write and comprehend technical reports, diagnostic and treatment reports, treatment plans, and professional correspondence.
Individuals educated in foreign countries must meet the criteria required by the International Commission of Healthcare Professions (ICHP) in order to meet this standard.

Standard IV-C: The applicant for certification in speech-language pathology must complete a minimum of 400 clock hours of supervised clinical experience in the practice of speech-language pathology. Twenty-five hours must be spent in clinical observation, and 375 hours must be spent in direct client/patient contact.

Implementation:
Observation hours generally precede direct contact with clients/patients. However, completion of all 25 observation hours is not a prerequisite to begin direct client/patient contact. For certification purposes, the observation and direct client/patient contact hours must be within the scope of practice of speech-language pathology.
For certification purposes, observation experiences must be under the direction of a qualified clinical supervisor who holds current ASHA certification in the appropriate practice area. Such direction may occur simultaneously with the student's observation or may be through review and approval of written reports or summaries submitted by the student. Students may use videotapes of the provision of client services for observation purposes. The applicant must maintain documentation of time spent in supervised observation, verified by the program in accordance with Standards III and IV.
Applicants should be assigned practicum only after they have acquired a sufficient knowledge base to qualify for such experience. Only direct contact with the client or the client's family in assessment, management, and/or counseling can be counted toward practicum. Although several students may observe a clinical session at one time, clinical practicum hours should be assigned only to the student who provides direct services to the client or client's family. Typically, only one student should be working with a given client. In rare circumstances, it is possible for several students working as a team to receive credit for the same session depending on the specific responsibilities each student is assigned. For example, in a diagnostic session, if one student evaluates the client and another interviews the parents, both students may receive credit for the time each spent in providing the service. However, if one student works with the client for 30 minutes and another student works with the client for the next 45 minutes, each student receives credit for the time he/she actually provided services— that is, 30

and 45 minutes, not 75 minutes. The applicant must maintain documentation of time spent in supervised practicum, verified by the program in accordance with Standards III and IV.

Standard IV-D: At least 325 of the 400 clock hours must be completed while the applicant is engaged in graduate study in a program accredited in speech-language pathology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology.
Implementation:
A minimum of 325 clock hours of clinical practicum must be completed at the graduate level. The remaining required hours may have been completed at the undergraduate level, at the discretion of the graduate program.

Standard IV-E: Supervision must be provided by individuals who hold the Certificate of Clinical Competence in the appropriate area of practice. The amount of supervision must be appropriate to the student's level of knowledge, experience, and competence. Supervision must be sufficient to ensure the welfare of the client/patient.
Implementation:
Direct supervision must be in real time and must never be less than 25% of the student's total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements that should be adjusted upward if the student's level of knowledge, experience, and competence warrants. A supervisor must be available to consult as appropriate for the client's/patient's disorder with a student providing clinical services as part of the student's clinical education. Supervision of clinical practicum must include direct observation, guidance, and feedback to permit the student to monitor, evaluate, and improve performance and to develop clinical competence.

All observation and clinical practicum hours used to meet Standard IV-C must be supervised by individuals who hold a current CCC in the professional area in which the observation and practicum hours are being obtained Only the supervisor who actually observes the student in a clinical session is permitted to verify the credit given to the student for the clinical practicum hours.

Standard IV-F: Supervised practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities.
Implementation:
The applicant must demonstrate direct client/patient clinical experiences in both diagnosis and treatment with both children and adults from the range of disorders and differences named in Standard III-C.

Standard IV-G: The applicant for certification must complete a program of study that includes supervised clinical experiences sufficient in breadth and depth to achieve the following skills outcomes:
1. Evaluation:

a. conduct screening and prevention procedures (including prevention activities)
b. collect case history information and integrate information from clients/patients, family, caregivers, teachers, relevant others, and other professionals
c. select and administer appropriate evaluation procedures, such as behavioral observations, nonstandardized and standardized tests, and instrumental procedures
d. adapt evaluation procedures to meet client/patient needs
e. interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention
f. complete administrative and reporting functions necessary to support evaluation
g. refer clients/patients for appropriate services

2. Intervention:

a. develop setting -appropriate intervention plans with measurable and achievable goals that meet clients'/patients' needs. Collaborate with clients/patients and relevant others in the planning process.
b. implement intervention plans (involve clients/patients and relevant others in the intervention process)
c. select or develop and use appropriate materials and instrumentation for prevention and intervention
d. measure and evaluate clients'/patients' performance and progress
e. modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients
f. complete administrative and reporting functions necessary to support intervention
g. identify and refer clients/patients for services as appropriate

3. Interaction and Personal Qualities:

a. communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others
b. collaborate with other professionals in case management
c. provide counseling regarding communication and swallowing disorders to clients /patients, family, caregivers, and relevant others
d. adhere to the ASHA Code of Ethics and behave professionally

Implementation:
The applicant must document the acquisition of the skills referred to in this Standard applicable across the nine major areas listed in Standard III-C. Clinical skills may be developed and demonstrated by means other than direct client/patient contact in clinical practicum experiences, such as academic course work, labs, simulations, examinations, and completion of independent projects. This documentation must be maintained and verified by the program director or official designee.
For certification purposes, only direct client/patient contact may be applied toward the required minimum of 375 clock hours of supervised clinical experience.

STANDARD V: ASSESSMENT
The applicant for certification must demonstrate successful achievement of the knowledge and skills delineated in Standard III and Standard IV by means of both formative and summative assessment.
Standard V-A: Formative Assessment
The applicant must meet the education program's requirements for demonstrating satisfactory performance through ongoing formative assessment of knowledge and skills.
Implementation:
Formative assessment yields critical information for monitoring an individual's acquisition of knowledge and skills. Therefore, to ensure that the applicant pursues the outcomes stipulated in Standard III and Standard IV in a systematic manner, academic and clinical educators must have assessed developing knowledge and skills throughout the applicant's program of graduate study. Applicants may also be part of the process through self-assessment. Applicants and program faculties should use the ongoing assessment to help the applicant achieve requisite knowledge and skills. Thus, assessments should be followed by implementation of strategies for acquisition of knowledge and skills.
The applicant must adhere to the academic program's formative assessment process and must maintain records verifying ongoing formative assessment. The applicant shall make these records available to the Council For

Clinical Certification upon its request. Documentation of formative assessment may take a variety of forms, such as checklists of skills, records of progress in clinical skill development, portfolios, and statements of achievement of academic and practicum course objectives, among others.

Standard V-B: Summative Assessment
The applicant must pass the national examination adopted by ASHA for purposes of certification in speech-language pathology.
Implementation:
Summative assessment is a comprehensive examination of learning outcomes at the culmination of professional preparation. Evidence of a passing score on the ASHA-approved national examination in speech-language pathology must be submitted to the National Office by the testing agency administering the examination.

STANDARD VI: SPEECH-LANGUAGE PATHOLOGY CLINICAL FELLOWSHIP
After completion of academic course work and practicum (Standard VI), the applicant then must successfully complete a Speech-Language Pathology Clinical Fellowship (SLPCF).
Implementation:
The Clinical Fellow may be engaged in clinical service delivery or clinical research that fosters the continued growth and integration of the knowledge, skills, and tasks of clinical practice in speech-language pathology consistent with ASHA's current Scope of Practice. The Clinical Fellow's major responsibilities must be in direct client/patient contact, consultations, record keeping, and administrative duties.
The SLPCF may not be initiated until completion of the graduate course work and graduate clinical practicum required for ASHA certification.
It is the Clinical Fellow's responsibility to identify a mentoring speech-language pathologist (SLP) who holds a current Certificate of Clinical Competence in Speech-Language Pathology. Before beginning the SLPCF and periodically throughout the SLPCF experience, the Clinical Fellow must contact the ASHA National Office to verify the mentoring SLP's current certification status.

Standard VI-A: The mentoring speech-language pathologist and Speech-Language Pathology Clinical Fellow will establish outcomes and performance levels to be achieved during the Speech-Language Pathology Fellowship (SLPCF), based on the Clinical Fellow's academic experiences, setting -specific requirements, and professional interests/goals.
Implementation:
The Clinical Fellow and mentoring SLP will determine outcomes and performance levels in a goal-setting conference within 4 weeks of initiating the SLPCF. It is the Clinical Fellow's responsibility to retain documentation of the agreed-upon outcomes and performance levels. The mentoring SLP's guidance should be adequate throughout the SLPCF to achieve the stated outcomes, such that the Clinical Fellow can function independently by the completion of the SLPCF. The Clinical Fellow will submit the SLPCF Report and Rating Form to the Council For Clinical Certification at the conclusion of the SLPCF.

Standard VI-B: The Clinical Fellow and mentoring SLP must engage in periodic assessment of the Clinical Fellow's performance, evaluating the Clinical Fellow's progress toward meeting the established goals and achievement of the clinical skills necessary for independent practice.

Implementation:
Assessment of performance may be by both formal and informal means. The Clinical Fellow and mentoring SLP should keep a written record of assessment processes and recommendations. One means of assessment must be the SLPCF Report and Rating Form.

Standard VI-C: The Speech-Language Pathology Clinical Fellowship (SLPCF) will consist of the equivalent of 36 weeks of full-time clinical practice.
Implementation:
Full-time clinical practice is defined as a minimum of 35 hours per week in direct patient/client contact, consultations, record keeping, and administrative duties relevant to a bona fide program of clinical work. The length of the SLPCF may be modified for less than full-time employment (FTE) as follows:

15-20 hours/week over 72 weeks
21-26 hours/week over 60 weeks
27-34 hours/week over 48 weeks

Professional experience of less than 15 hours per week does not meet the requirement and may not be counted toward the SLPCF. Similarly, experience of more than 35 hours per week cannot be used to shorten the SLPCF to less than 36 weeks.

Standard VI-D: The Clinical Fellow must submit evidence of successful completion of the Speech-Language Pathology Clinical Fellowship (SLPCF) to the Council For Clinical Certification.
Implementation:
The Clinical Fellow must submit the SLPCF Report and Rating Form, which includes the Clinical Fellowship Skills Inventory (CFSI) and documentation of successful achievement of the goals established at the beginning of the SLPCF. This report must be completed by both the Clinical Fellow and the mentoring SLP. The Clinical Fellow must also submit the Employer(s) Verification Form, signed by the employer, which attests to the completion of the 36-week full-time SLPCF or its part-time equivalent.

Standard VII: Maintenance of Certification
Demonstration of continued professional development is mandated for maintenance of the Certificate of Clinical Competence in Speech-Language Pathology. This standard took effect on January 1, 2005. The renewal period will be 3 years. This standard will apply to all certificate holders, regardless of the date of initial certification.
Implementation:
Individuals who hold the Certificate of Clinical Competence (CCC) in Speech-Language Pathology must accumulate 30 contact hours of professional development over the 3-year period in order to meet this standard. Individuals will be subject to random review of their professional development activities. If renewal of certification is not accomplished within the 3-year period, certification will lapse. Re-application for certification will be required, and certification standards in effect at the time of re-application must be met. Continued professional development may be demonstrated through one or more of the following options:

- Accumulation of 3 continuing education units (CEUs) (30 contact hours) from continuing education providers approved by the American Speech-Language-Hearing Association (ASHA). ASHA CEUs may be earned through group activities (e.g., workshops, conferences), independent study (e.g., course development, research projects, internships, attendance at educational programs offered by non-ASHA CE providers), and self-study (e.g., videotapes, audiotapes, journals).

- Accumulation of 3 CEUs (30 contact hours) from a provider authorized by the International Association for Continuing Education and Training (IACET).

- Accumulation of 2 semester hours (3 quarter hours) from a college or university that holds regional accreditation or accreditation from an equivalent nationally recognized or governmental accreditation authority.

- Accumulation of 30 contact hours from employer-sponsored in-service or other continuing education activities that contribute to professional development.

Professional development is defined as any activity that relates to the science and contemporary practice of audiology, speech-language pathology, and speech/language/hearing sciences, and results in the acquisition of new knowledge and skills or the enhancement of current knowledge and skills. Professional development activities should be planned in advance and be based on an assessment of knowledge, skills and competencies of the individual and/or an assessment of knowledge, skills, and competencies required for the independent practice of any area of the professions.

For the first renewal cycle, beginning January 1, 2005, applications for renewal will be processed on a staggered basis, determined by initial certification dates.

- For individuals initially certified before January 1, 1980, professional development activities must be initiated after January 1, 2005, and completed by December 31, 2007.
- For individuals initially certified between January 1, 1980, and December 31, 1989, professional development activities must be initiated after January 1, 2006, and completed by December 31, 2008.
- For individuals initially certified between January 1, 1990, and December 31, 1999, professional development activities must be initiated after January 1, 2007, and completed by December 31, 2009.
- For individuals initially certified between January 1, 2000, and December 31, 2004, professional development activities must be initiated after January 1, 2008, and completed by December 31, 2010.

All individuals will have a 3-year period to complete the process for renewal of certification.

This page was updated on: **7/1/2005**.

Knowledge and Skills Required for the Practice of Audiologic/Aural Rehabilitation

Working Group on Audiologic Rehabilitation

About This Document

This document, Knowledge and Skills Required for the Practice of Audiologic/Aural Rehabilitation, was approved by the ASHA Legislative Council in April 2001 (LC-11) and is an official statement of the American Speech-Language-Hearing Association (ASHA). The document was prepared by the Working Group on Audiologic Rehabilitation in response to a charge from the American Speech-Language-Hearing Association's Executive Board (EB 83-97) to update the Association's definition of and competencies for aural rehabilitation document (ASHA, 1984). Committee members responsible for the development of this document include Susan J. Brannen (monitoring vice president), Catherine Carotta, Catherine C. Clark, Sue Ann Erdman (chair), Charissa R. Lansing, Joseph J. Montano, Mary June Moseley, Richard Nodar (past monitoring vice president), David J. Wark, and Evelyn J. Williams (ex officio). Pamela L. Jackson and Mary Pat Moeller served as consultants during the final stages of document development.

Introduction

The ASHA scope of practice documents (ASHA, 1996a, 1996b, 2001) indicate that the practice of audiology and speech-language pathology includes providing services for audiologic/aural rehabilitation (AR). ASHA's Preferred Practice Patterns (ASHA, 1997a, 1997b) are statements that include definitions of universally applicable characteristics of AR practice. ASHA requires that individuals who practice independently in this area hold the Certificate of Clinical Competence in Audiology or Speech-Language Pathology and abide by the 1994 ASHA Code of Ethics, including Principle of Ethics II Rule B, which states: “Individuals shall engage in only those aspects of the profession that are within their competence, considering their level of education, training, and experience.”

Both audiologists and speech-language pathologists traditionally have provided rehabilitative services for children and adults with hearing disorders. Because hearing disorders can profoundly affect the acquisition, development, and use of speech and language, audiologists' and speech-language pathologists' roles may be complementary, interrelated, and, at times, overlapping. Inherent in the practice of AR are many areas of knowledge and skills that are fundamental to both audiology and speech-language pathology.

Clinical research and technological advances have expanded the range and increased the complexities of clinical activities that are now considered routine aspects of AR. AR no longer connotes merely speechreading and auditory training to help compensate for loss of hearing sensitivity due to peripheral impairment. It consists of more than a hearing aid orientation and a 30-day trial period. Many audiologists now view AR as a process in which the effects of an extended range of auditory disorders, including tinnitus and disequilibrium, are also addressed. It is an area of clinical endeavor in which global issues such as mode of communication, literacy, and self-advocacy have brought consumers' needs to the forefront. Rehabilitative assessment measures; educational, behavioral, technological, and counseling intervention procedures; and ongoing client-clinician interaction to evaluate and monitor progress are now considered integral aspects of a client-centered rehabilitation model that *promotes successful adherence to treatment recommendations and professional accountability*. Widespread implementation of neonatal screening programs makes it possible to provide early intervention for infants with diagnosed hearing impairment, [1] thereby significantly minimizing delays in speech and language development. In addition, programmable/digital and implantable hearing aids, cochlear and middle ear implants, tinnitus maskers, and an ever-increasing assortment of assistive technologies have provided clinicians with an expanding and flexible array of devices with which to help individuals adjust to and cope with the effects of their specific hearing problems. The communication and psychosocial disadvantages that may be imposed on individuals with hearing problems, on their significant others, on the marital dyad itself, and on family dynamics are also now the focus of those who provide AR services. Society's emphasis on environmental modifications to enhance accessibility for those with physical limitations has also expanded the focus of the clinician's role in AR. Although maximum communication effectiveness continues to be the primary goal of the AR process, the scope of the process now encompasses the whole person, with attention to his or her specific communication needs, behavioral and psychosocial adjustment, and interpersonal, educational, and vocational functioning. The evolving breadth of AR services makes it less and less likely that audiologists and speech-language pathologists have identical roles in AR or that they bring the same knowledge and skills to that process.

The purpose of this document is to provide an updated description of the knowledge and skills audiologists and speech-language pathologists demonstrate in the practice of AR so as to enhance (a) the delivery of services by members of both professions and (b) the collaborative nature of AR.

Background

The ASHA Committee on Rehabilitative Audiology (ASHA, 1980, 1984) prepared a set of minimal competencies for clinicians who provide AR services. The committee asserted that clinicians' skills, interests, and training typically determine the extent to which they have the necessary competencies to provide AR whether they are audiologists or speech-language pathologists. Although in 1974 the Legislative Council had previously approved a position paper in which the audiologist was identified as the primary provider and supervisor of AR (ASHA, 1974), the Committee on Rehabilitative Audiology made no distinctions between AR providers from the two professions.

AR, in all probability, has represented the area of clinical endeavor in which the audiologist's and speech-language pathologist's knowledge and skills have been the most closely related and strongly inter-twined. Traditionally, AR has been defined as services and procedures for facilitating adequate receptive and expressive communication in individuals with auditory dysfunction. These services and procedures are intended for those persons who demonstrate a loss of hearing or who function as such in communication situations. The Committee on Rehabilitative Audiology (ASHA, 1984), in fact, defined AR as a series of activities and services (see Appendix). More recent trends and definitions, however, depict AR as an ongoing facilitative process in which the client is viewed within the context of his/her psychosocial environment, and in which he or she actively engages (Erdman, Wark, & Montano, 1994; Gagné, Hétu, Getty, & McDuff, 1995; Hyde & Riko, 1994; Noble, 1996; Noble & Hétu, 1994; Stephens, 1996). This ecological approach focuses on the *whole person* and emphasizes general well-being. In view of the expanding scope of AR activities and because rehabilitation is best viewed as an ongoing process in which clients engage, rather than simply as specific services that clinicians provide, the Working Group on Audiologic Rehabilitation adopted the following definition for the purposes of this document:

> Audiologic/aural rehabilitation (AR) is an ecological, interactive process that facilitates one's ability to minimize or prevent the limitations and restrictions that auditory dysfunctions can impose on well-being and communication, including interpersonal, psychosocial, educational, and vocational functioning.

With either definition one can, in general, envision the clinician as an audiologist or a speech-language pathologist. The conceptualization of or indeed the scope of practice in AR, however, has expanded such that not all aspects of AR are as likely to be addressed by either an audiologist or a speech-language pathologist as they were 20 years ago.

Several other factors support the current need to distinguish between the knowledge and skills audiologists and speech-language pathologists must have to practice AR. Effective with LC 7-89, audiology and speech-language pathology officially became two separate and distinct professions. The two professions have separate scope of practice statements, separate preferred practice patterns, separate policy-making assemblies within the governance structure of the Association, and separate curriculum and practicum requirements for professionals. The advent of different entry-level degree requirements portends greater independence between graduate programs in audiology and speech-language pathology. In addition, the expanding scopes of practice in both professions make it less likely that clinicians will develop knowledge and skills in areas in which they are less involved or interested. The net effect of these developments is a decrease in the extent to which AR services provided by audiologists and by speech-language pathologists directly overlap.

Given the above considerations, two separate sets of knowledge and skills follow. One identifies the knowledge and skills in AR for audiologists; the second identifies the knowledge and skills in AR for speech-language pathologists. The current and most recently approved Standards for Certification in Audiology (ASHA, 1997c) and in Speech-Language Pathology (ASHA 1993a, 1993b, Council on Professional Standards in Speech-Language Pathology and Audiology, 2000), the current and emergent Scope of Practice Statements (ASHA, 1996a, 1996b, 2001), the Preferred Practice Patterns (PPP; ASHA 1997a, 1997b), and hearing aid fitting guidelines (ASHA, 1998) served as guidelines to identify the specific areas of knowledge and skills for each profession's range of activities in AR.

The Standards for Clinical Certification in the professions delineate those areas of knowledge and skills that entry-level clinicians can be expected to demonstrate. The Scope of Practice Statements list professional activities that define the range of services provided within each profession. These statements are updated periodically to reflect emergent areas of clinical practice. The PPPs describe (a) universally applicable characteristics of activities directed toward individual clients, (b) structural requisites for the practice processes to be carried out, and (c) intended outcomes of practice. The practice pattern statements are updated to reflect research findings and technological advances that are expected to improve the effectiveness of clinical intervention. The Scope of Practice Statements reflect the breadth and depth of clinical practice; the Preferred Practice Patterns describe areas of practice with considerable specificity.

The areas of knowledge and skills identified herein are those which audiologists and speech-language pathologists who provide AR services are, at a minimum, expected to demonstrate. They are not restrictive or limiting of the other areas or levels of knowledge and skills one could or should have.[2] The separate sets of knowledge and skills presented herein differ in accordance with the respective profession's Certification Standards, Scope of Practice, and Preferred Practice Patterns. As such, they reflect the knowledge and skills clinicians in each profession are more likely to have as well as the areas of emphasis and levels of expertise generally attributed to each profession. Identification of profession-specific knowledge and skills is expected to strengthen intraprofessional AR service provision and to facilitate interprofessional collaboration and promotion of a view of AR as the interdisciplinary endeavor that it often is. For clinicians whose area of expertise or specialization is AR—and pediatric AR in particular—it is anticipated that the knowledge and skills from both areas may actually define their scope of practice. Graduate students and clinicians with interests in AR can use the document to identify areas for future coursework or continuing education. Those individuals who wish to specialize in all areas of practice in AR will find it useful to visualize the breakdown in areas of knowledge and skills, be it for selection of a graduate program, a profession, specific coursework or clinical training, or continuing education experiences. Graduate programs will find the document useful in curriculum and practicum planning. The document may also be useful in employment settings for determining job descriptions. Finally, should interested groups pursue the establishment of specialty recognition in AR, the areas of skill and knowledge identified herein will be useful guides.

Knowledge and Skills for Audiologists Providing AR Services

Basic Areas of Knowledge

Audiologists who provide AR services demonstrate knowledge in the basic areas that are the under-pinnings of communication sciences and disorders. These include the following:

1. General Knowledge
    1. General psychology; human growth and development; psychosocial behavior; cultural and linguistic diversity; biological, physical, and social sciences; mathematics; and qualitative and quantitative research methodologies.
2. Basic Communication Processes
    1. Anatomic and physiologic bases for the normal development and use of speech, language, and hearing (including anatomy, neurology, and physiology of speech, language, and hearing mechanisms);
    2. Physical bases and processes of the production and perception of speech and hearing (including acoustics or physics of sound, phonology, physiologic and acoustic phonetics, sensory perceptual processes, and psychoacoustics);
    3. Linguistic and psycholinguistic variables related to the normal development and use of speech, language, and hearing (including linguistics [historical, descriptive, sociolinguistics, sign language, second language usage], psychology of language, psycholinguistics, language and speech acquisition, verbal learning and verbal behavior, and gestural communication);
    4. Dynamics of interpersonal skills, communication effectiveness, and group theory.

Special Areas of Knowledge and Skills

Audiologists who provide AR have knowledge in the following special areas and demonstrate the itemized requisite skills in those areas:

- III. Auditory System Function and Disorders
    1. Identify, describe, and differentiate among disorders of auditory function (including disorders of the outer, middle, and inner ear; the vestibular system; the auditory nerve and the associated neural and central auditory system pathways and processes);
- IV. Developmental Status, Cognition, and Sensory Perception
    1. Provide for the administration of assessment measures in the client's preferred mode of communication;
    2. Verify adequate visual acuity for communication purposes;
    3. Identify the need and provide for assessment of cognitive skills, sensory perceptual and motor skills, developmental delays, academic achievement, and literacy;
    4. Determine the need for referral to other medical and nonmedical specialists for appropriate professional services;
    5. Provide for ongoing assessments of developmental progress.
- V. Audiologic Assessment Procedures
    1. Conduct interview and obtain case history;
    2. Perform otoscopic examinations and ensure that the external auditory canal is free of obstruction, including cerumen;
    3. Conduct and interpret behavioral, physiologic, or electrophysiologic evaluations of the peripheral and central auditory systems;

4. Conduct and interpret assessments for auditory processing disorders;
5. Administer and interpret standardized self-report measures of communication difficulties and of psychosocial and behavioral adjustment to auditory dysfunction;
6. Identify the need for referral to medical and nonmedical specialists for appropriate professional services.

- VI. Speech and Language Assessment Procedures
    1. Identify the need for and perform screenings for effects of hearing impairment on speech and language;
    2. Describe the effects of hearing impairment on the development of semantic, syntactic, pragmatic, and phonologic aspects of communication, both in terms of comprehension and production;
    3. Provide for appropriate measures of speech and voice production;
    4. Provide for appropriate measures of language comprehension and production skills and/or alternate communication skills (e.g., signing);
    5. Administer and interpret appropriate measures of communication skills in auditory, visual, auditory-visual, and tactile modalities.
- VII. Evaluation and Management of Devices and Technologies for Individuals With Hearing Impairment (e.g., hearing aids, cochlear implants, middle ear implants, implantable hearing aids, tinnitus maskers, hearing assistive technologies, and other sensory prosthetic devices)
    1. Perform and interpret measures of electroacoustic characteristics of devices and technologies;
    2. Describe, perform, and interpret behavioral/psychophysical measures of performance with these devices and technologies;
    3. Conduct appropriate fittings with and adjustments of these devices and technologies;
    4. Monitor fitting of and adjustment to these devices and technologies to ensure comfort, safety, and device performance;
    5. Perform routine visual, listening, and electroacoustic checks of clients' hearing devices and sensory aids to troubleshoot common causes of malfunction;
    6. Evaluate and describe the effects of the use of devices and technologies on communication and psychosocial functioning;
    7. Plan and implement a program of orientation to these devices and technologies to ensure realistic expectations; to improve acceptance of, adjustment to, and benefit from these systems; and to enhance communication performance;
    8. Conduct routine assessments of adjustment to and effective use of amplification devices to ensure optimal communication function;
    9. Monitor outcomes to ensure professional accountability.
- VIII. Effects of Hearing Impairment on Functional Communication
    1. Identify the individual's situational expressive and receptive communication needs;
    2. Evaluate the individual's expressive and receptive communication performance;
    3. Identify environmental factors that affect the individual's situational communication needs and performance;
    4. Identify the effects of interpersonal relations on communication function.
- IX. Effects of Hearing Impairment on Psychosocial, Educational, and Occupational Functioning
    1. Describe and evaluate the impact of hearing impairment on psychosocial development and psychosocial functioning;
    2. Describe systems and methods of educational programming (e.g., mainstream, residential) and facilitate selection of appropriate educational options;
    3. Describe and evaluate the effects of hearing impairment on occupational status and performance (e.g., communication, localization, safety);
    4. Identify the effects of hearing problems on marital dyads, family dynamics, and other interpersonal communication functioning;
    5. Identify the need and provide for psychosocial, educational, family, and occupational/vocational counseling in relation to hearing impairment and subsequent communication difficulties;
    6. Provide assessment of family members' perception of and reactions to communication difficulties.
- X. AR Case Management
    1. Use effective interpersonal communication in interviewing and interacting with individuals with hearing impairment and their families;
    2. Describe client-centered, behavioral, cognitive, and integrative theories and methods of counseling and their relevance in AR;
    3. Provide appropriate individual and group adjustment counseling related to hearing loss for individuals with hearing impairment and their families;
    4. Provide auditory, visual, and auditory-visual communication training (e.g., speechreading, auditory training, listening skills) to enhance receptive communication;
    5. Provide training in effective communication strategies to individuals with hearing impairment, family members, and other relevant individuals
    6. Provide for appropriate expressive communication training

7. Provide appropriate technological and counseling intervention to facilitate adjustment to tinnitus;
8. Provide appropriate intervention for management of vestibular disorders;
9. Develop and implement an intervention plan based on the individual's situational/environmental communication needs and performance and related adjustment difficulties;
10. Develop and implement a system for measuring and monitoring outcomes and the appropriateness and efficacy of intervention.

- XI. Interdisciplinary Collaboration and Public Advocacy
    1. Collaborate effectively as part of multidisciplinary teams and communicate relevant information to allied professionals and other appropriate individuals;
    2. Plan and implement in-service and public-information programs for allied professionals and other interested individuals;
    3. Plan and implement parent-education programs concerning the management of hearing impairment and subsequent communication difficulties;
    4. Advocate implementation of public law in educational, occupational, and public settings;
    5. Make appropriate referrals to consumer-based organizations.
- XII. Hearing Conservation/Acoustic Environments
    1. Plan and implement programs for prevention of hearing impairment to promote identification and evaluation of individuals exposed to hazardous noise and periodic monitoring of communication performance and auditory abilities (e.g., speech recognition in noise, localization);
    2. Identify need for and provide appropriate hearing protection devices and noise abatement procedures;
    3. Monitor the effects of environmental influences, amplification, and sources of trauma on residual auditory function;
    4. Measure and evaluate environmental acoustic conditions and relate them to effects on communication performance and hearing protection.

AR Knowledge and Skills for Speech- Language Pathologists

Basic Areas of Knowledge

Speech-language pathologists who provide AR services demonstrate knowledge in the basic areas that are the underpinnings of communication sciences and disorders. These include the following:

1. General Knowledge
    1. General psychology; human growth and development; psychosocial behavior; cultural and linguistic diversity; biological, physical, and social sciences; mathematics; and qualitative and quantitative research methodologies.
2. Basic Communication Processes
    1. Anatomic and physiologic bases for the normal development and use of speech, language, and hearing (including anatomy, neurology, and physiology of speech, language, and hearing mechanisms);
    2. Physical bases and processes of the production and perception of speech and hearing (including acoustics or physics of sound, phonology, physiologic and acoustic phonetics, sensory perceptual processes, and psychoacoustics);
    3. Linguistic and psycholinguistic variables related to the normal development and use of speech, language, and hearing (including linguistics [historical, descriptive, sociolinguistics, sign language, second language usage], psychology of language, psycholinguistics, language and speech acquisition, verbal learning and verbal behavior, and gestural communication);
    4. Dynamics of interpersonal skills, communication effectiveness, and group theory.

Special Areas of Knowledge and Skills

Speech-language pathologists who provide AR have knowledge in the following special areas and demonstrate the itemized requisite skills in those areas:

- III. Auditory System Function and Disorders
    1. Describe the impact of various disorders of auditory function on communication (including disorders of the outer, middle, and inner ear, and the auditory nerve and the associated neural and central auditory system pathways and processes).
- IV. Developmental Status, Cognition, and Sensory Perception
    1. Provide for the administration of assessment measures in the client's preferred mode of communication;
    2. Verify adequate visual acuity for communication purposes;
    3. Identify the need for assessment of cognitive, sensory perceptual and motor skills, developmental delays, academic achievement, and literacy;
    4. Determine the need for referral to other medical and nonmedical specialists for appropriate professional services;
    5. Provide for ongoing assessments of developmental progress.

- V. Audiologic Assessment Procedures
    1. Conduct audiologic screening as appropriate for initial identification and/or referral purposes;
    2. Describe type and degree of hearing loss from audiometric test results (including pure tone thresholds, immittance testing, and speech audiometry);
    3. Refer to and consult with an audiologist for administration and interpretation of differential diagnostic procedures (including behavioral, physiological and electrophysiological measures).
- VI. Assessment of Communication Performance
    1. Provide for assessment measures in the client's preferred mode of communication;
    2. Identify and perform screening examinations for speech, language, hearing, auditory processing disorders, and reading and academic achievement problems;
    3. Identify and perform diagnostic evaluations for the comprehension and production of speech and language in oral, signed, written or augmented form;
    4. Provide diagnostic evaluations of speech perception in auditory, visual, auditory-visual, or tactile modalities;
    5. Identify the effects of hearing loss on speech perception, communication performance, listening skills, speechreading, communication strategies, and personal adjustment;
    6. Provide for clients' self-assessment of communication difficulties and adjustment to hearing loss;
    7. Monitor developmental progress in relation to communication competence.
- VII. Devices and Technologies for Individuals With Hearing Loss (e.g., hearing aids, cochlear implants, middle ear implants, implantable hearing aids, hearing assistive technologies, and other sensory prosthetic devices)
    1. Describe candidacy criteria for amplification or sensory-prosthetic devices (e.g., hearing aids, cochlear implants);
    2. Monitor clients' prescribed use of personal and group amplification systems;
    3. Describe options and applications of sensory aids (e.g., assistive listening devices) and telephone/telecommunication devices;
    4. Identify the need and refer to an audiologist for evaluation and fitting of personal and group amplification systems and sensory aids;
    5. Implement a protocol, in consultation with an audiologist, to promote adjustment to amplification;
    6. Perform routine visual inspection and listening checks of clients' hearing devices and sensory aids to troubleshoot common causes of malfunctioning (e.g., dead or corroded batteries, obstruction or damage to visible parts of the system);
    7. Refer on a regularly scheduled basis clients' personal and group amplification systems, other sensory aids, and assistive listening devices for comprehensive evaluations to ensure that instruments conform to audiologists' prescribed settings and manufacturers' specifications;
    8. Describe the effects of amplification use on communication function;
    9. Describe and monitor the effects of environmental factors on communication function.
- VIII. Effects of Hearing Loss on Psychosocial, Educational, and Vocational Functioning
    1. Describe the effects of hearing loss on psychosocial development;
    2. Describe the effects of hearing loss on learning and literacy;
    3. Describe systems and methods of educational programming (e.g., mainstream, residential) and facilitate selection of appropriate educational options;
    4. Identify the need for and availability of psychological, social, educational, and vocational counseling;
    5. Identify and appropriately plan for addressing affective issues confronting the person with hearing loss;
    6. Identify appropriate consumer organizations and parent support groups.
- IX. Intervention and Case Management
    1. Develop and implement a rehabilitative intervention plan based on communication skills and needs of the individual and family or caregivers of the individual;
    2. Provide for communication and counseling intervention in the client's preferred mode of communication;
    3. Develop expressive and receptive competencies in the client's preferred mode of communication;
    4. Provide speech, language, and auditory intervention (including but not limited to voice quality and control, resonance, phonologic and phonetic processes, oral motor skills, articulation, pronunciation, prosody, syntax/morphology, semantics, pragmatics);
    5. Facilitate appropriate multimodal forms of communication (e.g., auditory, visual, tactile, speechreading, spoken language, Cued Speech, simultaneous communication, total communication, communication technologies) for the client and family;
    6. Conduct interviews and interact effectively with individuals and their families;
    7. Develop and implement a system to measure and monitor outcomes and the efficacy of intervention.
- X. Interdisciplinary Collaboration and Public Advocacy
    1. Collaborate effectively as part of multidisciplinary teams and communicate relevant information to allied professionals and other appropriate individuals;

2. Plan and implement in-service and public-information programs for allied professionals and other interested individuals;
3. Plan and implement parent-education programs concerning the management of hearing loss and subsequent communication problems;
4. Plan and implement interdisciplinary service programs with allied professionals;
5. Advocate implementation of public law in educational, occupational, and public settings;
6. Refer to consumer-based organizations.

- XI. Acoustic Environments
    1. Provide for appropriate environmental acoustic conditions for effective communication;
    2. Describe the effects of environmental influences, amplification systems, and sources of trauma on residual auditory function;
    3. Provide for periodic hearing screening for individuals exposed to hazardous noise.

Professional Implications

The interdisciplinary nature of AR, particularly in the area of pediatrics where speech and language intervention is crucial, supports the need for additional training/coursework beyond the current minimal requirements for certification for either audiology or speech-language pathology. AR services for children must include the expertise generally provided by an audiologist in addition to the knowledge and skills of a speech-language pathologist. This can be achieved in a number of ways. There are clinicians whose training, interest, and experience easily enable them to demonstrate the requisite knowledge and skills identified herein for both audiologists and speech-language pathologists. Nonetheless, in view of current training models, expanding scopes of practice, and the tendency toward specialty rather than general practice, it is more likely that individual clinicians primarily will have the knowledge and skills representative of their individual profession. Hence, AR in many settings will continue to be provided as an interdisciplinary or transdisciplinary service, with clinicians from both professions providing complementary or supplementary services. In those cases, it is hoped that delineation of the areas of expertise will simplify and expedite service delivery while improving its quality.

As in any area of clinical practice, members of ASHA are bound by the Code of Ethics (ASHA, 1994) to practice within the scope of their particular knowledge and skills. Individuals providing AR services should be especially mindful of this in view of cross-disciplinary expectations from employers. Separation of the areas of knowledge and skills for audiologists and speech-language pathologists should be of help to clinicians in this regard. Speech-language pathologists in nursing home or public school settings, for example, are not required to demonstrate knowledge and skills in the areas of hearing aid fittings or adjustments beyond manual inspections for damage or dead batteries. Ethically, to provide services beyond that level, one must be able to demonstrate that one has the requisite knowledge and skills to do so. It is entirely appropriate to reference the Skills and Knowledge in AR and the ASHA Code of Ethics documents to delimit one's scope of practice in such situations. Conversely, if one does provide services beyond those described in the Scope of Practice for the profession in which one is certified and beyond those areas of AR knowledge and skills delineated for that profession herein, one is similarly bound by the Code of Ethics to be able to demonstrate that one has the requisite knowledge and skills.

In view of the rapid development of technology and emergent research that increases our understanding of the complex needs of those who have hearing problems, the scope of AR continues to grow. Hence, the areas of knowledge and skill required to maintain competency continue to evolve. Practitioners must engage in an ongoing, self-directed process of continuing education that is motivated by career responsibilities and changes. Professionalism mandates that speech-language pathologists, audiologists, and related professional organizations take an active role in the creation of appropriate learning experiences that facilitate the application of new information in the clinical arena. Professionals must assume responsibility for assessing their needs in the area of professional development; moreover, they must assume responsibility for informing employers of areas of needed growth. And employers and program directors must be supportive of professionals' efforts to meet the ever-changing needs of the field.

Opportunities for continuing education are present in a variety of formats: traditional academic coursework, distance-learning, in-service training, workshops, professional meetings/conventions of associations, teleconferences, videoconferences, journal and study groups, self-study, and so forth. Addressing the ongoing and changing needs of individuals with hearing loss requires professionals and learning institutions to demonstrate that they value change, have an ability to adapt, use reflective and systematic thinking practices, and have the ability to establish cross-disciplinary communities of learning (Chawla & Renesch, 1995; Senge, 1990). To achieve this standard in AR, professionals and organizations alike must realize that continuing education is not a luxury but a necessity—a necessity that can only be addressed by professionals and organizations creating plans for growth with an eye on the current and future needs of individuals with hearing loss (Smutz & Queeney, 1990).

Academic Training Implications

Ideally, the basic knowledge and skills necessary to provide AR should be acquired during academic training. Academic programs quite naturally vary, however, in the extent to which content areas are emphasized in the curriculum. Even within the core curriculum, graduate requirements and certification standards permit clinicians-in-training considerable flexibility in terms of electives and practicum experiences. Across academic programs there is variability in terms of what AR courses are offered and how they are offered; they may be offered as audiology courses or as speech-language pathology courses. Such subtle differences can affect enrollment, the perception of course content, and the perception of AR as an area of practice. Many academic programs do not have specific requirements for students with an interest in AR regardless of whether they are audiology or speech-language pathology students.

Specifying the AR knowledge and skills audiologists and speech-language pathologists should each have provides considerable clarification to those responsible for developing curriculum and practicum experiences in academic programs. Identifying the requisite knowledge and skills provides academic programs with guidelines in the selection, evaluation, and monitoring of academic and clinical experiences. Furthermore, an outcomes-based approach allows training programs to indicate more clearly to potential employers what to expect from graduating students. This not only increases the credibility of the training program but also improves student performance for at least two reasons. First, employers may be less inclined to impose unrealistic expectations upon the clinician. Second, if the content of the training is properly specified, the clinician should be better prepared to meet the critical demands of the work setting. From the clinician's perspective, such shifts in job-readiness and employer attitudes should lead to increased credibility, effectiveness, and job satisfaction. More important, from the client's perspective these shifts should facilitate improved service delivery and outcomes.

A repeated concern is that the implementation of knowledge and skills will necessarily increase the time required for students to matriculate. This is a legitimate concern in view of rising education costs and declining enrollments at the graduate level. Fortunately, the marked expansion of rehabilitative activities and responsibilities in audiology coincides with the profession's transition to a doctoral-level profession that will facilitate inclusion of academic and clinical experiences designed to maximize students' knowledge and skills in the assessment and management of individuals with auditory disorders. Another important consideration, however, is that not all training occurs at the pre-service level. In fact, it is unreasonable to expect any pre-service training program to be the complete source of knowledge in any profession. We should only expect that pre-service training will provide the emerging professional with the skills for meeting a limited set of client and employer needs and the strategies for acquiring new knowledge and skills on the job. Technological and clinical advancements, as well as changing clinical responsibilities, can result in a demand for additional competencies. From this standpoint, continuing education assumes a prominent role in clinical training. It, therefore, becomes critical that we delineate training and service-delivery guidelines that extend beyond the pre-service level. As such, the areas of knowledge and skills described herein are intended to delineate comprehensive service delivery independent of training method or level.

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Appendix: ASHA 1984 Definition of Aural Rehabilitation [3]

I. Identification and Evaluation of Sensory Capabilities
   1. Identification and evaluation of the extent of the impairment, including assessment, periodic monitoring, and re-evaluation of auditory abilities;
   2. Monitoring of other sensory capabilities (e.g., visual and tactile-kinesthetic) as they relate to receptive and expressive communication;

3. Evaluation, fitting and monitoring of auditory aids and monitoring of other sensory aids (e.g., visual and vibrotactile) used by the auditorily handicapped person in various communication environments (e.g., home, work, and school). Such auditory and sensory aids are taken to include all amplification systems (group and individual), as well as such supplementary devices as telephone amplifiers, alarm systems and so on;
4. Evaluation and monitoring of the acoustic characteristics of the communication environments confronted by the hearing-impaired person.

II. Interpretation of Results, Counseling and Referral
1. Interpretation of audiologic findings to the student/client, his/her family, employer, teachers, and significant others involved in communication with the hearing-impaired person;
2. Guidance and counseling for the client, his/her family, employer, caregiver, teachers, and significant others concerning the educational, psychosocial, and communication effects of hearing impairment;
3. Guidance and counseling for the parent/caregiver regarding educational options available, selection of educational programs, and facilitation of communication and cognitive development;
4. Individual and/or family counseling regarding acceptance and understanding of the hearing impairment, functioning within difficult listening situations, facilitation of effective strategies and attitudes toward communication, modification of communication behavior in keeping with those strategies and attitudes, and promotion of independent management of communication-related problems;
5. Referral for additional services (e.g., medical, psychological, social, and educational), as appropriate.

III. Intervention for Communication Difficulties
1. Development and provision of an intervention program to facilitate expressive and receptive communication;
2. Provision of hearing and speech conservation programming;
3. Service as a liaison between the client, family, and other agencies concerned with the management of communication disorders related to hearing impairment.

IV. Re-evaluation of the Client's Status

V. Evaluation and Modification of the Intervention Program

Notes

[1] Members of the Working Group on Audiologic Rehabilitation acknowledge the sensitive nature of terminology used to describe hearing ability in an individual. Where the term *impairment* occurs, it refers to problems in body function or structure (i.e., *hearing impairment* is the loss of hearing at the organ level, not a descriptor of the individual's personal activity or social function). this is in accordance with the parameters set forth by the World Health Organization (WHO, 1980, 2000).

[2] To underscore the nonrestrictive, nonlimiting description of skills in AR, the phrase *provide for* is used. For example, although a specific AR skill may generally be provided by a speech-language pathologist, an audiologist who is competent in the specific skill may also provide this expertise and service. In contrast, if the audiologist does *not* have competence in the specific skill area then it must be *provided for* and thus may require collaboration with or referral to a speech-language pathologist who is competent in the specific skill area. This holds true as well when an audiologist would typically provide the service but a particular speech-language pathologist has the requisite knowledge and skills to do so.

[3] Excerpt from: Definitions of and competencies for aural rehabilitation (ASHA, 1984).

Index terms: audiologic/aural rehabilitation

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Clinical Record Keeping in Audiology and Speech-Language Pathology

Clear and comprehensive records are necessary to justify the need for treatment, to document the effectiveness of that treatment, and to have a legal record of events. Professionals in all positions and settings must be concerned with documentation. The American Speech-Language-Hearing Association (ASHA) requires that "accurate and complete records [be] maintained for each client and [be] protected with respect to confidentiality" (ASHA, 1992). Excellent record keeping does not guarantee good care, but poor record keeping poses an obstacle to clinical excellence (Kibbee & Lilly, 1989).

This document is intended to serve as a guide for audiology and speech-language pathology programs in establishing, revising, and maintaining clinical records. The information encompasses ASHA's standards and implementation procedures for professional service programs in audiology and speech-language pathology (ASHA, 1989, 1992). It is also based on the Health Care Financing Administration (HCFA) requirements, and incorporates those of the Joint Commission on Accreditation of Health Care Organizations (JCAHO) and the Commission on Accreditation of Rehabilitation Facilities (CARF). Additional concepts and practical suggestions from representatives of several clinical facilities are also included.

Clinical Record Keeping Process

I. The Documentor (Who)

A. Usually person who renders the assessment, care, or treatment

B. In emergency situation, person designated to document detailed account of situation

II. Components of Clinical Record Keeping (What)

A. Identifying information

1. Facility name and client's clinic or medical record number
2. Client name and related identifying data (address, telephone number, date of birth, and caretaker or legally responsible person to whom information can be released)
3. Client insurance or social security number
4. Referring physician's name, certification, and related identifying information (e.g., Universal Physician Identification Number). Medicare and most private insurance companies require this information.
5. Professional service (speech-language pathology or audiology) provider's name, certification, and related identifying information
6. Referral source, related identifying information, reason for referral and date (if applicable)
7. Billing period (usually a 30-day cycle for most private insurance companies and Medicare)
8. Date report is prepared and evaluation date

B. Client History (including documents from other sources, such as medical records, education records, previous evaluation reports, etc.)

1. Medical diagnosis(es) (primary, secondary, including date[s] of onset)
2. Communication disorder diagnosis (primary, receiving more than 50% of intervention, and secondary, receiving less than 50% of intervention), and onset date(s)
3. Medical history (pertinent to speech, language, or hearing treatment), including surgical procedures
4. Education status/occupational status (as appropriate)
5. Prior functional communication status
6. Prior speech, language, or hearing treatment and outcome of that treatment
7. Length of treatment in prior settings
8. Additional pertinent information (e.g., medical records, psychological reports, educational tests and observations)
9. Source(s) of client history

C. Assessment of Current Client Status

1. Date of initial assessment/reassessment
2. Initial functional status of client in present facility based upon:
    a. Baseline testing (using standardized and on standardized measures)

b. Interpretation of test scores/results
c. Other clinical findings (including those from other specialists)

3. Documentation that speech-language pathology evaluations consider a client's hearing status and that audiology evaluations consider a client's speech-language status in order to determine if referral to the other professional is necessary
4. Statement of prognosis
5. Recommendations based on the client's functional needs (including referrals as appropriate)
6. Signature and title of qualified professional responsible for the assessment (and that of the documenter, if different)

D. Treatment Plan

1. Date plan of treatment established
2. Short- and long-term functional communication goals (should reflect desired client outcomes: the level of communication independence the client is expected to achieve based on input from the client and/or family)
3. Treatment objectives
4. Recommended type and expected amount (e.g., 1-hour session), frequency (e.g., three times per week), and duration (e.g., 9 months) of present treatment. (Medicare requires documentation of the expected duration of treatment. This information can be revised as needed with rationale for a change in expected duration.)
5. Follow-up activities
6. Statement of prognosis
7. Date treatment plan was discussed with client and/or family
8. Date interdisciplinary conferences were held
9. Statement of the schedule for review of the plan
10. Signature and title of qualified professional responsible for treatment plan (and that of the documenter, if different)

E. Documentation of Treatment

1. Date client began treatment at present facility
2. Time period covered by the report
3. Summaries of assessment and treatment plan in treatment reports
4. Number of times to date that treatment was rendered in present facility and length of sessions
5. Current client status: communication diagnosis and objective measures of client communication performance in functional terms that relate to treatment goals (e.g., pre- and post-testing with interpretation of test scores, using same or comparable measures to those used in original assessment)
6. Any changes in prognosis (include significant developments)
7. Any changes in plan of treatment
8. Follow-up recommendations (if client is discharged) or description of need for continued intervention
9. Signature and title of qualified professional responsible for treatment services (and that of the documenter, if different). Note: The supervisor of noncertified personnel, including persons in Clinical Fellowship (CF), must sign all records.(Medicare recognizes ASHA's standards for supervision of persons in CF. Therefore, cosignatures by the supervisor are required only when direct supervision of care has occurred.) It is suggested that the supervisor co-sign evaluation and discharge summary reports.

F. Record of Consultation

1. Consultation with other professionals
2. Consultation with client and caretakers or legally responsible party (or parties)

G. Correspondence pertinent to the individual client

III. Storage (Where)

A. General Information

1. In secure place, to be accessed only by authorized personnel
2. Safeguarded against loss or destruction

B. Current clinical records

1. In accessible place

C. Historical clinical records

1. Transferred to microfilm
2. Maintained through computer storage
3. In secure yet less accessible place (away from current files)

IV. Time Frame for Recording, Sending, and Retaining Information (When)

A. Recording

1. According to time frame set by:

a. National, state, community, and accrediting body standards
b. Facility
c. Department
d. Common sense (typically, as soon after the event as possible)

B. Sending Reports and Information to Other Professionals

1. According to a specified time frame (typically, 15 working days) for sending information to other professionals re:

a. Inpatient/outpatient reports
b. Evaluation/progress/discharge reports

2. According to specified time frame (typically, 15 working days) for releasing information to client, caregiver, or other legally responsible party

C. Storage and Maintenance

1. Current clinical records

a. Computerized records—according to routine procedure for backing up computerized records (e.g., every night)
b. Files — when not in use should be stored in a secure yet accessible manner

2. Historical clinical records

a. According to schedule for filing and transferring historical files (e.g., to microfilm) for archival storage
b. According to state law or when no law exists, a created policy that reflects client/patient and program needs—i.e., 5–7 years (some records may need to be kept permanently)? In the absence of a pertinent state statute, Medicare's record retention requirements are the same as the state of Maryland (see footnote); however, client or parent notification does not permit earlier destruction of medical records. Program record keeping procedures may vary. Some programs may use electronic storage. Some facilities may require that this information be maintained in a central medical storage unit. Regardless of storage system, accurate, complete, and accessible information is necessary for good organization and maintenance of records.
c. Disposal of obsolete records should be in a manner that protects the confidentiality of client information.

V. Rationale for Documentation (Why)

A. Reasons for appropriate documentation (see JCAHO, 1992):

1. Justify entry into treatment
2. Justify continued treatment
3. Support the diagnosis and treatment
4. Describe client progress
5. Describe client response to intervention(s)
6. Justify discharge from care
7. Support reimbursement

B. Additional reasons for appropriate documentation:

1. Facilitate continuous quality improvement
2. Use as basis for the planning and continuity of evaluation
3. Justify clinical decisions
4. Document communication between involved parties (practitioners, client, caregiver, or legally responsible party [parties])
5. Protect legal interests of client, service provider, and facility
6. Provide data for continuing education.
7. Provide data for research (i.e., efficacy)

VI. Methods (How)

A. Clinical record keeping should:

1. Conform to federal, state, and local laws
2. Adhere to facility's standards and regulations

B. Writing should be clearly understood by the reader; that is, content should be:

1. Accurate, concise, and informative
2. Adapted for a potentially large readership
3. Useful and relevant to other staff (i.e., so that anyone can pick up record and continue treatment)
4. Neat and legible

C. Clinical records should be consistent in format and style:

1. As established by facility (e.g., SOAP note format—subjective, objective, assessment, plan [Miller & Groher, 1990])

2. Using codes from International Classification of Diseases–Clinical Modification (ICD-CM), current revision (U.S. Department of Health and Human Services, 1991)
3. Using procedural codes from Physicians' Current Procedural Terminology (CPT), current edition, when appropriate (American Medical Association, 1993)
4. Using appropriate terms per ASHA's Classification of Speech-Language Pathology and Audiology Procedures and Communication Disorders (ASHA, 1987)

D. Clinical records need to be organized with entries recorded chronologically
1. Rather than leaving spaces to fill in at a later time, flagging the entry and charting it out of sequence is better than leaving a blank space to fill in at a later time.
2. Entering only what has taken place, not anticipated activities or observations
3. Maintaining continuity

E. Clinical record keeping should be simplified when possible, using:
1. Flowsheets or checklists to streamline (these do not substitute for detailed documentation of assessments and interventions)
2. Current symbols or abbreviations (constantly updated) from an approved facility list
3. A printout of the face sheet when file is computerized (for use in recording information during client visit)
4. Description of intervention as "treatment according to treatment plan" when this statement accurately describes planned activities

F. The documenter must assure accuracy by:
1. Proofreading documentation to verify that it says what was meant
2. Appropriately correcting an entry (i.e., crossing out incorrect material with one line, writing reason for change, entering the correct information, and dating and initialing the correction)

G. The documenter should provide rationale for such clinical decisions as test selection, diagnosis, prognosis, treatment goals, and recommendations. For example, rationale for treatment should be stated to reflect:
1. Whether medical diagnosis is a degenerative disease, and whether that client has stabilized or is in remission
2. That treatment is based on comprehensive evaluation, and that ongoing evaluation is part of the treatment and rehabilitation process
3. Significant functional improvement in objective measurable terms when describing progress
4. How client has applied progress from treatment sessions to other situations

H. The documenter must be sensitive to client rights, by:
1. Avoiding personal or flippant remarks
2. Including signed documentation about consultation with client, caregiver, and/ or legally responsible person
3. Obtaining signed and dated releases of information forms in compliance with state policy whenever documents are released or information is disclosed

I. Clinical records must be treated as a legal document, by:
1. Typing or using ink for permanence
2. Signing all record entries with name and professional title of primary care person and all appropriate professionals
3. Dating and initialing materials from other facilities before entering them into permanent record. **Note:** For legal purposes, records need to be thorough, accurate, and include all necessary signatures and release authorizations.

J. A procedure for record maintenance should be instituted, such as:
1. Conducting a records review to ensure that records are complete, accurate, and maintained on proper schedule
2. Developing troubleshooting techniques by:
    a. Predicting potential problems
    b. Planning response to remediate each problem
    c. Following up on each problem
3. Developing checklist for completing each form (so that it is accurately completed the first time)

K. Clinical records must be kept in an organized and systematic fashion, by, for example,
1. Keeping a chronological log on inside folder for easy reference. Log should list dates and services provided, name or initials of the provider of the service and other identifying information, such as client number (e.g., contact sheet)
2. Safe guarding against loss (e.g., affix records to record jackets)
3. Separating current from historical files and storing them appropriately (See IIIA, IIIB, IIIC, and IVC.)
4. Indicating where and to whom reports are sent (e.g., appropriate cc notations on reports, and consistent notations on contact sheets).

Additional Considerations

• Medical/clinical records are the property of the facility.
• All information and records are confidential unless otherwise provided by law.
• For reimbursement purposes (so that the client receives the treatment to which he or she is entitled), documentation needs to prove that professional treatment is warranted. That is, there must be functional deficits requiring intervention only by a

skilled professional who is qualified to assess client needs, plan and implement effective treatment, and consider (and prevent) potential medical complications.

The Health Care Financing Administration (HCFA) has implemented standardized Medicare Outpatient Rehabilitation Services Forms used optionally by intermediaries (Medicare claims processing organizations). Developed with input from several disciplines (e.g., speech-language pathology, occupational therapy, physical therapy), they provide a uniform framework for reporting initial evaluations and monthly progress for Medicare reimbursement.

- The way records are organized may vary. Records could be organized using either of the following systems:
  - — Problem-oriented documentation: record is organized according to a list of defined client problems
  - — Outcome-oriented documentation: record is organized on the basis of client's goals or outcomes
- Within either system, records should be organized according to alphabetical or numerical order. Records and files should be organized systematically so that they can be accessed and understood by all potential readers, including the original documenter in future years.

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Notes

[1] As an example, Maryland stipulates that health care providers may not destroy a patient's medical record for 5 years after the record or report is made unless the patient is notified. In addition, if the patient is a minor, "records may not be destroyed until the patient attains the age of majority plus 3 years or 5 years after the report is made, whichever is later," unless a parent or guardian is notified. (Maryland House of Delegates Bill No. 197, 1992)

Index terms: documentation activities

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AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

Knowledge and Skills Needed by Speech-Language Pathologists With Respect to Reading and Writing in Children and Adolescents

Ad Hoc Committee on Reading and Writing

About This Document

This knowledge and skills document is an official statement of the American Speech-Language-Hearing Association (ASHA). The ASHA Scope of Practice states that the practice of speech-language pathology includes providing services for disorders of "language (i.e., phonology, morphology, syntax, semantics, and pragmatic/ social aspects of communication) including comprehension and expression in oral, written, graphic, and manual modalities; language processing; preliteracy and language-based literacy skills, including phonological awareness" (ASHA, 2001).

The ASHA Preferred Practice Patterns for the Profession of Speech-Language Pathology (1997) are statements that define universally applicable characteristics of practice. ASHA requires that individuals who practice independently in speech-language pathology hold the Certificate of Clinical Competence in Speech-Language Pathology. They also must abide by the ASHA Code of Ethics, including Principle of Ethics II Rule B, which states: "Individuals shall engage in only those aspects of the profession that are within their competence, considering their level of education, training, and experience."

The Position Statement, Technical Report, and Guidelines for Roles and Responsibilities of Speech-Language Pathologists With Respect to Reading and Writing in Children and Adolescents were developed by the Ad Hoc Committee on Reading and Writing and approved by the ASHA Legislative Council in 2000. Members of the Ad Hoc Committee on Reading and Writing, which produced those documents and this one, were Nickola Nelson (chair), Hugh Catts, Barbara Ehren, Froma Roth, Cheryl Scott, Maureen Staskowski, and Roseanne Clausen (ex officio). Diane Paul-Brown, Kathleen Whitmire, and Susan Karr provided consultation. Alex Johnson, 2001–2002 vice president for professional practices in speech-language pathology, and Nancy Creaghead, 1997–1999 vice president for professional practices in speech-language pathology, served as monitoring officers.

Assumptions

This document summarizes knowledge and skills needed by speech-language pathologists (SLPs) who work with reading and writing in children and adolescents. It is founded on several assumptions.

A first assumption is that practitioners have general background knowledge and skills that do not need to be reiterated here. These include knowledge regarding basic communication principles and parameters, skill in implementing the clinical practices of speech-language pathology, and attitudes of sensitivity to the needs of clients as members of larger familial, cultural, linguistic, and social systems. The lack of repetition of these basic expectations in this document should not be construed as minimizing their importance.

A second assumption is that boundaries between knowledge and skills are not always clear. That is, declarative knowledge *about* something is often intertwined with procedural knowledge (or skills) for being *able to do* something. Both are tempered by conditional knowledge that enables one to decide strategically how to apply declarative and procedural knowledge in real-life clinical situations.

A third assumption is that roles and responsibilities related to reading and writing in children and adolescents are essentially collaborative in nature. No one discipline "owns" them. SLPs work collaboratively with families, teachers, and other professionals to meet the literacy learning needs of infants, toddlers, children, and adolescents with and without disabilities.

A fourth assumption is that the knowledge and skills outlined here may be acquired in multiple learning environments, including continuing education, as well as preservice undergraduate and graduate education experiences. The specific knowledge and skills outlined in this document build on the basic knowledge and skills SLPs have about speech, language, and communication in general. This outline is intended to inform the activities of both university and continuing education program planners, as well as individual practitioners who are continuing to develop their skills. These knowledge and skills are necessary to meet the needs of children and adolescents with impaired communication systems in written as well as spoken language domains, and to understand the ramifications of not doing so.

Roles and Responsibilities

As indicated in the Guidelines for Roles and Responsibilities of Speech-Language Pathologists With Respect to Reading and Writing in Children and Adolescents, appropriate roles and responsibilities for SLPs with regard to reading and writing in children and adolescents include, but are not limited to:

1. **Prevention.** This role addresses the goal to prevent written language problems by fostering language acquisition and emergent literacy.
2. **Identification.** This role addresses the goal of identifying children and adolescents with (or at risk for) reading and writing problems so that they may receive appropriate attention.
3. **Assessment.** This role addresses the goal of assessing reading and writing abilities and relating them to spoken communication, academic achievement, and other areas.
4. **Intervention.** This role addresses the goal to provide effective intervention for problems involving reading and writing and documenting the outcomes.
5. **Other roles.** Other roles include providing assistance to general education teachers, families, and students; advocating for effective literacy practices; and advancing the knowledge base.

Knowledge and Skills for Reading and Writing Roles

The specialized knowledge base for these roles can be summarized into five categories. The categories are listed here and expanded below:

1. **The nature of literacy**, including spoken-written language relationships, and reading and writing as acts of communication and tools of learning.
2. **Normal development** of reading and writing in the context of the general education curriculum.
3. **Disorders of language and literacy** and their relationships to each other and to other communication disorders.
4. **Clinical tools and methods** for targeting reciprocal spoken and written language growth.
5. **Collaboration, leadership, and research principles** for working with others, serving as advocates, and advancing knowledge about evidence-based practices.

The skills that SLPs are expected to have to implement the roles are listed subsequently under the five roles: prevention, identification, assessment, intervention, and "other."

Five Areas of Knowledge Relating Language and Literacy

1. **Knowledge of the nature of literacy, spokenwritten language relationships, and reading and writing as acts of communication and tools of learning.**
    - 1.1. Knowledge of the nature of proficient reading as influenced by knowledge of spoken language and involving word recognition, comprehension, and higher-order strategic thinking and executive functions.
    - 1.2. Knowledge of the nature of writing as involving spelling and composing skills within a framework that includes both writing processes (what writers do during planning, organizing, drafting, revising, editing, and publishing) and written products (what writers produce at levels of discourse structure and cohesion, sentence-level complexity and style, word choice, spelling, and writing conventions).
    - 1.3. Knowledge of phonology, phonetics, English orthography, word roots and history of origin, the alphabetic principle (i.e., letters representing speech sounds); and how readers and writers use knowledge of such systems to decode and spell words.
    - 1.4. Knowledge of semantics, morphology, syntax, discourse structure, and sociolinguistic variation, and how readers and writers use knowledge of such systems to comprehend and compose literate discourse.
    - 1.5. Knowledge of similarities and differences between spoken and written language forms (e.g., lexical choice differences, distribution of phrases, sentences, and cohesion structures), and how both spoken and written language can be literate.
    - 1.6. Knowledge of the continuum of literacy levels from basic functional literacy to advanced academic/aesthetic literacy.
2. **Knowledge of the normal development of reading and writing in the context of the general education curriculum.**
    - 2.1. Knowledge of emergent literacy contributions to literacy development, including spoken language interactions, environmental exposure to print, interactions with books and shared book reading, experiences with writing tools and pretend writing for varied purposes, and adult modeling of literacy.
    - 2.2. Knowledge of reciprocal relationships among listening, speaking, reading, writing, and thinking.
    - 2.3. Knowledge of age- and grade-based milestones for developing phonological awareness, learning the alphabetic principle, learning to decode and spell words, comprehending increasingly complex written language, and using increasingly mature writing processes to create higher-level written products.
    - 2.4. Knowledge of how metalinguistic knowledge (i.e., consciously knowing about language) differs in earlier stages of reading and spelling when sound and morpheme awareness are prominent, to later stages of reading and

composing when executive strategies and explicit understanding of sentence and text structures help students read and write proficiently for academic and scholarly purposes.
    - 2.5. Knowledge of how cultural-linguistic diversity affects spoken and written language learning from preschool through postsecondary years.
    - 2.6. Knowledge about curricular materials, subjectspecific curriculum content, and language/literacy expectations and standards from preschool through post-secondary education.
3. **Knowledge of disorders of spoken language and literacy and their links to each other and to related communication disorders.**
    - 3.1. Knowledge about the language bases of disorders of reading, spelling, and writing, as well as risk factors, both internal (e.g., genetic and neurobiological), and external (e.g., socioeconomic and experiential limitations) related to prevention and early identification of reading and writing problems.
    - 3.2. Knowledge about the characteristics and "life span" expectations for individuals with primary language impairments, from late talkers to preschoolers with language impairments, who often become older school-age children, adolescents, and adults with language impairments and academic problems, including that:
        - 3.2.1. Preschool children with language impairments tend to have difficulty with rhyming, letter knowledge, and other concepts related to emergent literacy.
        - 3.2.2. Elementary age children with early appearing language impairments tend to exhibit problems with phonology, semantics, morphology, syntax, cohesive discourse, and metalinguistic uses of language, as well as continuing problems in phonological processing that underlie word recognition and spelling.
        - 3.2.3. Other elementary age children may show later emerging language-based reading and writing problems without prior identification as speech-language impaired and in the absence of problems of phonological awareness and decoding.
        - 3.2.4. Adolescents and adults with language impairments tend to have difficulty with metalinguistic abilities, abstract language, higher-order thinking, and applying strategic thinking and selfregulation skills necessary for proficient reading and writing (metacognition). Some have continuing problems in phonological processing that underlie word recognition and spelling.
    - 3.3. Knowledge about the inherent variations and heterogeneity among spoken-written language disabilities, such as between individuals whose reading problems might be traced to a fairly isolated inability to master the alphabetic principle, compared with those whose problems extend beyond decoding to broader difficulties with higher-level language comprehension.
    - 3.4. Knowledge about how reading and writing development can be affected by conditions such as language-learning disabilities, autism spectrum disorders, cognitive disabilities, hearing impairments, infectious or traumatic brain impairments, or severe speech impairments and augmentative and alternative communication (AAC) needs.
4. **Knowledge of tools and methods for targeting reciprocal spoken and written language growth.**
    - 4.1. Knowledge about techniques for early identification of reading and writing difficulty, including formal and informal screening instruments and methods, as well as techniques for identifying underlying language problems associated with lack of reading and writing proficiency in older students.
    - 4.2. Knowledge about techniques and tools for identifying medical and/or environmental factors in language impairments.
    - 4.3. Knowledge about reading and writing assessment models and techniques, including standardized tests, as well as criterion-referenced, curriculum-based, and functional assessment methods for:
        - 4.3.1. Gathering reading and writing samples, as well as spoken ones.
        - 4.3.2. Describing individual profiles across language systems (phonology, morphology, syntax, semantics, pragmatics), levels (discourse, sentence, word, sound), and processes (decoding, comprehension, spelling, composing).
        - 4.3.3. Relating written language problems to spoken language systems, and to cognitive and metacognitive processes (e.g., retrieval, working memory, strategic thinking, executive function).
        - 4.3.4. Diagnosing impairments and suggesting approaches to intervention.
        - 4.3.5. Establishing a cumulative, longitudinal record of literacy strengths and needs, and intervention outcomes.
    - 4.4. Knowledge of dynamic assessment techniques and how to reduce bias when assessing the reading and writing abilities of students, including those with cultural and linguistic differences, emotional or behavioral issues, cognitive limitations, severe physical impairments, or multiple disabilities.
    - 4.5. Knowledge of what constitutes a comprehensive, balanced approach to literacy development that combines:
        - 4.5.1. Teaching phonological awareness and other aspects of emergent literacy and providing explicit instruction in the alphabetic principle.
        - 4.5.2. Helping students relate written and spoken language forms and uses.
        - 4.5.3. Explicit teaching of reading fluency and reading comprehension as well as decoding.
        - 4.5.4. Working on writing processes as well as products.
        - 4.5.5. Targeting both skills and strategies for proficient reading and writing.

        - 4.5.6. Providing opportunities to read and write for purposes of authentic communication.
        - 4.5.7. Teaching specific linguistic systems crucial for literacy, including derivational morphology, complex syntax, and narrative and expository text structure.
    - 4.6. Knowledge of varied intervention approaches and how to match them to students' needs for learning to read and write and to relate them to intervention for problems of listening and speaking.
    - 4.7. Knowledge of computer supports and other technological advances for students having difficulty learning to read and write.
5. **Knowledge of collaboration, leadership, and research principles for working with others, serving as advocates, and advancing the knowledge base.**
    - 5.1. Knowledge of the strategies and techniques of interdisciplinary collaboration and team skills and their use in addressing problems of reading and writing.
    - 5.2. Knowledge of leadership principles and how to work with others to effect positive changes at systemic levels.
    - 5.3. Knowledge about policies and politics; committees, panels, and debates; and how they influence the assessment and teaching of reading and writing in the states' and nation's schools.
    - 5.4. Knowledge of research principles, including how to conduct practice-based research to address language and literacy questions that arise as a function of reflective clinical practice.

Skills Related to Roles

1. **Prevention skills include the ability to use knowledge of multiple risk factors, including cooccurrence with spoken language difficulties to:**
    - 1.1. Predict which children might need more intensive experiences or instruction.
    - 1.2. Communicate risk factors for an individual child to others (e.g., the child's parents, preschool teachers, classroom teachers).
    - 1.3. Work with others to modify environmental or intrinsic conditions that place a child or adolescent at risk for learning to read and write at appropriate levels.
    - 1.4. Work with others to provide children and adolescents with and without disabilities with rich emergent literacy experiences to foster growth in all systems of language and to prevent difficulties in learning to read and write.
    - 1.5. Work with others to help children and adolescents acquire explicit, age-appropriate knowledge of language units (discourse, sentence, word, sound), systems (phonology, morphology, syntax, semantics, pragmatics), and processes (e.g., decoding, spelling, comprehension, composition, memory, retrieval, executive functioning) that are needed to prevent difficulty in literate language learning.
    - 1.6. Maintain longitudinal vigilance for students with language-learning risks to prevent difficulty with higher-level skills as literacy requirements and expectations advance.
2. **Identification skills include the ability to:**
    - 2.1. Help teachers recognize the signs of successful learning and differentiate them from symptoms of literacy learning risks, including how to recognize spoken and written language problems involving:
        - 2.1.1. Phonological, orthographic, morphological, and word knowledge and processing, along with effects on word decoding, spelling, and rapid word retrieval.
        - 2.1.2. Syntactic, semantic, and pragmatic knowledge, and contributions to literal and inferential sentence and discourse comprehension and production.
    - 2.2. Recognize reading and writing difficulties among children previously on the caseload for disorders of spoken language.
    - 2.3. Recognize when children with disabilities need explicit intervention and increased opportunities to read and write for communication purposes.
    - 2.4. Develop and communicate to teachers screening and referral procedures appropriate for different grade levels, including formal and informal screening instruments and teacher observation checklists.
    - 2.5. Work with populations of individuals with sociolinguistic differences, as well as with diverse disabilities, to modify identification procedures (e.g., to use dynamic assessment techniques and criterion referenced tasks) to meet children and adolescents' unique needs and to identify skills or difficulties that may otherwise be hidden.
    - 2.6. Establish a tracking system for identifying new or re-emerging literacy difficulties as children progress through the academic curriculum and language demands change.
3. **Assessment skills include the ability to:**
    - 3.1. Select and implement assessment materials and methods that are appropriate for a given child, considering teachers' and family concerns as well as knowledge about varied disability types, cultural background, and the child's or adolescent's unique profile of strengths and needs.
    - 3.2. Gather reading and writing samples using a variety of curriculum-based tasks and discourse genres, and apply knowledge of the reciprocal nature of spoken and written language to describe relationships among the student's abilities for phonological awareness, word-level decoding and spelling, sentence-level comprehension and formulation, and discourse-level comprehension and composition processes.

- 3.3. Use dynamic assessment techniques and other culturally appropriate and curriculum-relevant methods and materials to perform nonbiased assessments and to explore flexibility, speed, and limits of literacy skills.
- 3.4. Work with others to assure appropriate accommodations and/or interpretation of districtand state-mandated literacy assessments.

4. **Intervention skills including abilities to:**
   - 4.1. Apply current research and practice knowledge when making decisions about the intensity, longevity, and service delivery models that best fit particular children.
   - 4.2. Use assessment data about a student's current developmental levels in spoken and written language, along with knowledge of curricular expectations, to establish intervention targets and plan intervention activities in collaboration with teachers and families that are designed to keep the student progressing in the general education curriculum.
   - 4.3. Help a child or adolescent apply knowledge of all language systems—phonology, semantics, morphology, syntax, pragmatics—to decode and comprehend written text while reading, and to organize discourse, compose sentences, and spell words while writing.
   - 4.4. Teach children and adolescents a strategic approach to reading and writing.
   - 4.5. Decide when to isolate skills and strategies for concentrated practice and when to work with them in integrated contexts.
   - 4.6. Plan individualized instruction for students with varied patterns of strengths, needs, and disabilities (e.g., language-learning disability, deafness and hearing impairment, mental retardation, traumatic brain impairment, autism spectrum disorder, emotional or behavioral impairment, attention deficit hyperactivity disorder, severe speech impairment requiring augmentative and alternative communication methods, or communication disability in combination with second language learning).
   - 4.7. Work with teachers to include students with disabilities in classroom learning opportunities with peers, as well as in special presentations and performances involving literate language use.
   - 4.8. Use innovative technologies to maximize children's and adolescents' opportunities and to enhance their skills for learning to read, write, listen, and speak effectively.
   - 4.9. Document the outcomes of intervention.
5. **Skills for implementing other roles involving collaboration, leadership, advocacy, and ongoing development of knowledge to:**
   - 5.1. Advocate for the needs of children and adolescents with literacy learning and communication disorders of all kinds.
   - 5.2. Participate as members of interdisciplinary assessment teams and identify tools and strategies to be employed by each member of the team, in some cases sharing roles, as on transdisciplinary teams.
   - 5.3. Collaborate with general and special education teachers in a variety of service delivery models to provide inclusive educational experiences that maximize the potential of all students to progress in the general education curriculum.
   - 5.4. Manage caseload responsibilities to accommodate new or expanded roles with reading and writing.
   - 5.5. Work in nonschool settings to provide intervention that is relevant to school-based academic and social interaction needs.
   - 5.6. Conduct or participate in research to add to the knowledge base about spoken and written language and communication.
   - 5.7. Participate in and provide consultation and continuing education experiences to help colleagues learn about relationships among spoken and written language and the benefits of integrating them in instruction for all students.
   - 5.8. Contribute to policy development that makes it possible for students with disabilities to participate in literacy activities, to achieve in the general education curriculum, to graduate, and to compete successfully in gaining employment as adults.
   - 5.9. Provide information about normal development to committees and task forces that plan and evaluate curricula, establish comprehensive assessments, and set related policies.
   - 5.10. Develop and evaluate new methods, materials, and other technologies to improve assessment and intervention practices.

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III. Standards for Accreditation of Graduate Education Programs in Audiology and Speech-Language Pathology

Effective Date: January 1, 2008

Introduction

The Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA) accredits graduate[1] programs that prepare individuals to enter professional practice in audiology and/or speech-language pathology. The CAA was established by ASHA and is authorized to function autonomously in setting and implementing standards and awarding accreditation. The CAA is recognized by the Council for Higher Education Accreditation and by the U.S. Secretary of Education as the accrediting agency for the accreditation and preaccreditation (accreditation candidate) of education programs leading to the first professional or clinical degree at the master's or doctoral level and for the accreditation of these programs offered via distance education, throughout the United States.

The intention of accreditation is to promote excellence in educational preparation while assuring the public that graduates of accredited programs are educated in a core set of knowledge and skills required for independent professional practice. Quality education can be achieved in a variety of ways, and the CAA wishes to support programs in the achievement of the highest quality possible. These standards identify basic elements that must exist in all accredited graduate education programs while encouraging flexibility in the ways in which programs pursue excellence.

The CAA has identified the following six components as essential to quality education in the professions and has established its accreditation standards accordingly:

- Administrative structure and governance
- Faculty
- Curriculum (academic and clinical education)
- Students
- Assessment
- Program resources

Accreditation Standards

The CAA has adopted the following standards as necessary conditions for accreditation of eligible graduate education programs. The CAA is responsible for evaluating the adequacy of an applicant program's efforts to satisfy each standard. Compliance with all standards represents the minimum requirement for accreditation.

Recognizing that the entry-level degree programs in audiology and speech-language pathology are different in scope and delivery, Standard 3.0 (Curriculum) is divided into two separate components, 3.0A for audiology and 3.0B for speech-language pathology, to clarify the curricular distinctions between the professions. Separate reporting may be necessary for other standards where distinct differences exist between the audiology and speech-language pathology programs.

Standards for accreditation appear in **bold**. *Italicized* information following each standard provides interpretations or explanations of the standard and/or guidance to applicants on how to document compliance.

Standard 1.0 Administrative Structure and Governance

1.1 The applicant institution of higher education holds regional accreditation.

The institution of higher education within which the applicant audiology and/or speech-language pathology program is housed must hold regional accreditation from one of the following six regional accrediting bodies: (1) Middle States Commission on Higher Education; (2) New England Association of Schools and Colleges, Commission on Institutions of Higher Education; (3) The Higher Learning Commission of the North Central Association of Colleges and Schools; (4) Northwest Commission on Colleges and Universities; (5) Southern Association of Colleges and Schools, Commission on Colleges; or (6) Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities.

For programs with components located outside the region of the home campus, the program must verify to the CAA that all locations in which its academic components are housed, including official satellite campuses outside of the United States, are regionally accredited.

[1] **Graduate** refers to programs leading to a master's or doctoral degree, including a clinical doctoral degree, offered through graduate or professional schools.

1.2 The program's mission and goals are consistent with CAA standards for entry into professional practice (3.1A and/or 3.1B) and with the mission of the institution.

The mission statements of the institution, college, and program must be presented as evidence to support compliance with this standard. The program's faculty must regularly evaluate the congruence of program and institutional goals and the extent to which the goals are achieved.

1.3 The program develops and implements a long-term strategic plan.

The plan must be congruent with the mission of the institution, have the support of the university administration, and reflect the role of the program within the community. Components of a plan may include long-term goals, specific measurable objectives, strategies for attainment, a schedule for analysis, and a mechanism for regular evaluation of the plan itself and of progress in meeting the plan's objectives. The plan and the results of the regular evaluation of the plan and its implementation must be shared with faculty, students, staff, alumni, and other interested parties.

1.4 The program's faculty[2] has authority and responsibility for the program.

The institution must indicate by its administrative structure that the program's faculty is recognized as a body that can initiate, implement, and evaluate decisions affecting all aspects of the professional education program, including the curriculum. The program's faculty has reasonable access to higher levels of administration. The program must describe how substantive decisions regarding the academic and clinical programs are initiated, developed, and implemented by the program faculty. Programs without independent departmental status must be particularly clear in describing these aspects of the organizational structure.

1.5 The individual responsible for the program(s) of professional education seeking accreditation holds a graduate degree with a major emphasis in speech-language pathology, in audiology, or in speech, language, and hearing science and holds a full-time appointment in the institution. The individual effectively leads and administers the program(s).

Individuals without earned graduate degrees in the areas listed in the standard but with earned graduate degrees in other areas of major emphasis, such as linguistics, deaf education, special education, reading, administration, speech communication, or otolaryngology, typically do not satisfy this standard. A department chair who is not serving as the program director need not meet this standard, but is must be clear in this situation that the program director is indeed responsible for the program(s) of professional education.

Regular evaluation of the program director's effectiveness in advancing the goals of the program and institution and in leadership and administration of the program must be documented.

1.6 Students, faculty, staff, and persons served in the program's clinic are treated in a nondiscriminatory manner – that is, without regard to race, color, religion, sex, national origin, participation restriction, age, sexual orientation, or status as a parent. The institution and program comply with all applicable laws, regulations, and executive orders pertaining thereto.

The signature of the institution's president or designee on the application for accreditation affirms the institution's compliance with all applicable federal, state, and local laws prohibiting discrimination, including harassment, on the basis of race, color, religion, sex, national or ethnic origin, physical or mental disability or condition, age, sexual orientation, status as a parent, and status as a covered veteran, including, but not limited to, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1964, the Equal Pay Act, the Age Discrimination in Employment Act, the Age of Discrimination Act of 1975, Title IX of the Education Amendments of 1972 (to the Higher Education Act of 1965), the Rehabilitation Act of 1973, the Vietnam-Era Veterans Readjustment Assistance Act of 1974, and all amendments to the foregoing. The program demonstrates compliance through its policies and procedures.

1.7 The program provides information about the program and the institution to students and to the public that is current, accurate, and readily available.

Web sites, catalogs, advertisements, and other publications/electronic media must be accurate regarding the program's accreditation status, standards and policies regarding recruiting and admission practices, academic offerings, matriculation expectations, academic calendars, grading policies and requirements, and fees and other charges. Data on the following student outcome measures must be available to the public: program completion rates, Praxis examination pass rates, and employment rates. (See Standard 5.3 below.)

[2]In this document, the term **faculty**, unless otherwise qualified, is meant to include faculty members (tenure-track and non-tenure track), lecturers, clinical supervisors, and all other instructional staff members who are employees of the program. This term does not apply to off-site clinical supervisors, preceptors, internship mentors, or similar personnel who do not hold employment contracts with the institution of higher education.

Standard 2.0 Faculty

2.1 All faculty members, including individuals providing clinical education, are qualified and competent by virtue of their education, experience, and professional credentials to provide academic and clinical education assigned by the program.
Qualifications and competence to teach graduate-level courses and to provide clinical education must be evident in terms of appropriateness of degree level, practical or educational experiences specific to responsibilities in the program, and other indicators of competence to offer graduate education. All individuals providing clinical education, both on-site and off-site, must have appropriate experience and credentials for the professional area in which clinical education is provided.

The faculty must possess appropriate qualifications and expertise to provide the depth and breadth of instruction for the curriculum, consistent with the institutional expectations for clinical graduate programs. Academic content is to be taught by doctoral-level faculty except where there is a compelling rationale for instruction by an individual with other professional qualifications that satisfy institutional policy.

2.2 The number of full-time doctoral-level faculty in speech-language pathology, audiology, and speech, language, and hearing sciences and other full- and part-time faculty is sufficient to meet the teaching, research, and service needs of the program and the expectations of the institution. The institution provides stable support and resources for the program's faculty.
A sufficient number of qualified doctoral-level faculty with full-time appointments is essential for accreditation. This number must include research-qualified faculty (e.g., Ph.Ds). The program must document that the number of doctoral-level and other faculty is sufficient to offer the breadth and depth of the curriculum, including its scientific and research components, so that students can complete the requirements within a reasonable time period and achieve the expected knowledge and skills. The faculty must have sufficient time for scholarly and creative activities, advising students, participating in faculty governance, and other activities consistent with the institution's expectations. Faculty must be accessible to students.

Institutional commitment to the program's faculty is demonstrated through documentation of stability of financial support faculty, evidence that workload assignments are consistent with institutional policies, and evidence of positive actions taken on behalf of the program's faculty.

The program must demonstrate that faculty members have the opportunity to meet the institution's criteria for tenure, promotion, or continued employment, in accord with the institution's policies.

2.3 Faculty members maintain continuing competence.
The program must demonstrate that support, incentives, and resources are available for the continued professional development of the faculty. Examples of evidence include release time for research and professional development, support for professional travel, and professional development opportunities on campus.

Standard 3.0A Curriculum (Academic and Clinical Education in AUDIOLOGY)

3.1A The curriculum (academic and clinical education) is consistent with the mission and goals of the program and prepares students in the full breadth and depth of the scope of practice in audiology.
The program must provide a curriculum leading to an entry-level clinical doctoral degree with a major emphasis in audiology. The program must offer appropriate courses and clinical experiences on a regular basis so that students may satisfy the degree requirements within the published time frame.

The program must ensure that students have opportunities to acquire the knowledge and skills needed for entry into independent professional practice across the range of practice settings (including but not limited to hospitals, schools, private practice, community speech and hearing centers, and industry) and to meet relevant licensure and certification standards.

Doctoral-level programs in audiology must provide evidence of a curriculum that allows students to achieve the knowledge and skills listed below. Typically, the achievement of these outcomes requires the completion of 4 years of graduate education or the equivalent.

The doctoral curriculum in audiology must include a minimum of 12 months' full-time equivalent of supervised clinical experiences throughout the program of study. These include short-term rotations and longer term externships. Clinical experiences must constitute at least 25% of the program length. The aggregate total of clinical experiences must equal at least 12 months, to include direct client/patient contact, consultation, record keeping, and administrative duties relevant to professional service delivery in audiology. The program must provide sufficient breadth and depth of opportunities for students to obtain a variety of clinical experiences in different work settings, with different populations, and with appropriate equipment and resources in order to acquire and demonstrate skills across the scope of practice in audiology, sufficient to enter independent professional practice.

It is the responsibility of the program to plan a clinical program of study for each student. The program must demonstrate that it has sufficient agreements with supervisors or preceptors and clinical sites to provide each student with the clinical experience necessary

to prepare them for independent professional practice. It is the program's responsibility to design, organize, administer, and evaluate the overall clinical education of each student.

The doctoral academic and clinical curriculum in audiology must include instruction in the areas of (a) foundations of audiology practice, (b) prevention and identification, (c) evaluation, and (d) treatment, as described below.

Instruction in foundations of audiology practice must include opportunities for students to acquire knowledge in the following areas:

- Normal aspects of auditory physiology and behavior over the life span
- Interaction and interdependence of speech, language, and hearing in the discipline of human communication sciences and disorders
- Anatomy and physiology, pathophysiology and embryology, and development of the auditory and vestibular systems
- Principles, methods, and applications of psychoacoustics
- Effects of chemical agents on the auditory and vestibular systems
- Instrumentation and bioelectrical safety issues
- Infectious/contagious disease and universal precautions
- Physical characteristics and measurement of acoustic stimuli
- Physical characteristics and measurement of electric and nonacoustic stimuli
- Principles and practices of research, including experimental design, evidence-based practice, statistical methods, and application to clinical populations
- Medical/surgical procedures for treatment of disorders affecting auditory and vestibular systems
- Client/patient characteristics (e.g., age, demographics, cultural and linguistic diversity, medical history and status, cognitive status, and physical and sensory abilities) and how they relate to clinical services
- Genetic bases of hearing and hearing loss
- Speech and language characteristics across the life span associated with hearing impairment
- Development of speech and language production and perception
- Manual and other communication systems, use of interpreters, and assistive technology
- Ramifications of cultural diversity on professional practice
- Educational, vocational, and social and psychological effects of hearing impairment and their impact on the development of a treatment program
- Health care and educational delivery systems
- Professional codes of ethics and credentialing
- Supervisory processes and procedures
- Laws, regulations, policies, and management practices relevant to the profession of audiology

Instruction in prevention and identification of auditory and vestibular disorders must include opportunities for students to acquire the knowledge and skills necessary to

- Interact effectively with patients, families, other appropriate individuals, and professionals
- Prevent the onset and minimize the development of communication disorders
- Identify individuals at risk for hearing impairment
- Apply the principles of evidence-based practice
- Screen individuals for hearing impairment and activity limitation or participation restriction using clinically appropriate and culturally sensitive screening measures
- Screen individuals for speech and language impairments and other factors affecting communication function using clinically appropriate and culturally sensitive screening measures
- Administer conservation programs designed to reduce the effects of noise exposure and of agents that are toxic to the auditory and vestibular systems

Instruction in the evaluation of individuals with suspected disorders of auditory, balance, communication, and related systems include opportunities for students to acquire the knowledge and skills necessary to

- Interact effectively with patients, families, professionals, and others, as appropriate
- Evaluate information from appropriate sources to facilitate assessment planning
- Obtain a case history
- Perform an otoscopic examination
- Remove cerumen, when appropriate
- Administer clinically appropriate and culturally sensitive assessment measures
- Perform audiologic assessment using physiological, psychosocial, and self-assessment measures
- Perform electrodiagnostic test procedures

- Perform balance system assessment and determine the need for balance rehabilitation
- Perform assessment for rehabilitation
- Document evaluation procedures and results
- Interpret results of the evaluation to establish type and severity of disorder
- Apply the principles of evidence-based practice
- Generate recommendations and referrals resulting from the evaluation process
- Provide counseling to facilitate understanding of the auditory or balance disorder
- Maintain records in a manner consistent with legal and professional standards
- Communicate results and recommendations orally and in writing to the patient and other appropriate individual(s)
- Use instrumentation according to manufacturer's specifications and recommendations
- Determine whether instrumentation is in calibration according to accepted standards

Instruction in treatment of individuals with auditory, balance and related communication disorders must include opportunities for students to acquire the knowledge and skills necessary to

- Interact effectively with patients, families, professionals, and other appropriate individuals
- Develop and implement treatment plans using appropriate data
- Discuss prognosis and treatment options with appropriate individuals
- Counsel patients, families, and other appropriate individuals
- Develop culturally sensitive and age-appropriate management strategies
- Collaborate with other service providers in case coordination
- Conduct self-evaluation of effectiveness of practice
- Perform hearing aid, assistive listening device, and sensory aid assessment
- Recommend, dispense, and service prosthetic and assistive devices
- Provide hearing aid, assistive listening device, and sensory aid orientation
- Conduct audiologic rehabilitation
- Monitor and summarize treatment progress and outcomes
- Assess efficacy of interventions for auditory and balance disorders
- Apply the principles of evidence-based practice
- Establish treatment admission and discharge criteria
- Serve as an advocate for patients, families, and other appropriate individuals
- Document treatment procedures and results
- Maintain records in a manner consistent with legal and professional standards
- Communicate results, recommendations, and progress to appropriate individual(s)
- Use instrumentation according to manufacturer's specifications and recommendations
- Determine whether instrumentation is in calibration according to accepted standards

3.2A Academic and clinical education reflects current knowledge, skills, technology, and scope of practice. The curriculum is regularly reviewed and updated. The diversity of society is reflected throughout the curriculum.
The program must provide evidence that the curriculum is regularly and systematically evaluated and updated to reflect current knowledge and scope of practice in the profession. Sensitivity to issues of diversity should be infused throughout the curriculum. Evidence of regular and systematic evaluation may include institutional program evaluations, exit interviews, alumni and employer input, and faculty and administrative review of student performance and outcomes.

3.3A The scientific and research foundations of the profession are evident in the curriculum.
The program must demonstrate how it verifies that students obtain knowledge in the basic sciences (e.g., biological, behavioral, physical science, and mathematics), basic science skills (e.g., scientific methods and critical thinking), and the basic communication sciences (e.g., acoustics and physiological and neurological processes of speech, language, and hearing). The curriculum must reflect the scientific bases of the professions and include research methodology. The curriculum must provide opportunities for students to become knowledgeable consumers of research literature. The program of study must include research and scholarship opportunities that are consistent with the mission and goals of the program and institutional expectations for clinical doctoral programs.

3.4A The academic and clinical curricula reflect an appropriate sequence of learning experiences.
The program must provide evidence of appropriate sequencing of course work and clinical education. Appropriate sequencing must be evident in examples of typical programs of study including clinical placements.

3.5A Clinical supervision is commensurate with the clinical knowledge and skills of each student, and clinical procedures ensure that the welfare of each person served by students is protected, in accord with recognized standards of ethical practice and relevant federal and state regulations.
The program must demonstrate how the nature and amount of supervision are determined and adjusted to reflect the competence of each student. The program's written policies must describe the extent to which students are supervised and have access to supervisor or preceptor consultation when providing services to client/patients. Procedures for client/patient safety, confidentiality, and security of client/patient records must also be clearly described in the program's written policies in accordance with relevant federal and state regulations. Ethical standards must be clearly documented in the program's published materials.

3.6A Clinical education obtained in external placements is governed by agreements between the program and the external facility and is monitored by program faculty.
The program must provide examples of its written agreements with external facilities, its policies regarding the identification and ongoing evaluation of external facilities, procedures for selecting and placing students in external clinical sites, and evidence that clinical education in external facilities is monitored by the program to ensure that educational objectives are met.
3.7A The clinical education component of the curriculum provides students with access to a client/patient base that is sufficient to achieve the program's stated mission and goals and includes a variety of clinical settings, client/patient populations, and age groups.
The program must describe how it ensures that each student is exposed to a variety of populations across the life span and from culturally and linguistically diverse backgrounds. Clinical education must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities. The program must provide information about the size and diversity of the client/patient base and describe the clinical populations available in the facilities where students are placed.

3.8A The program must provide evidence that all curriculum standards are met, regardless of mode of delivery.
Distance education and other modes of education delivery must be examined to ensure that the course work and clinical education are equivalent to those offered in the existing program, including number of credits, availability and sequencing of courses, supervision, coordination of placements with external facilities, and diversity of client/patient population. The overall quality of the program must be equivalent across modes of delivery.

Standard 3.0B Curriculum (Academic and Clinical Education in SPEECH-LANGUAGE PATHOLOGY)
3.1B The curriculum (academic and clinical education) is consistent with the mission and goals of the program and prepares students in the full breadth and depth of the scope of practice in speech-language pathology.
The program must provide a curriculum leading to a master's or other entry-level graduate clinical degree with a major emphasis in speech-language pathology. The program must offer appropriate courses and clinical experiences on a regular basis so that students may satisfy the degree requirements within the published time frame.

The intent of this standard is to ensure that program graduates are able to acquire the knowledge and skills needed for entry into professional practice and to meet relevant licensure and certification standards.

Programs of study in speech-language pathology must be sufficient in depth and breadth for graduates to achieve the knowledge and skills outcomes identified for entry into professional practice as listed below. Typically, the achievement of these outcomes requires the completion of 2 years of graduate education or the equivalent.

The curriculum in speech-language pathology must provide the opportunity for students to complete a minimum of 400 clinical education hours, 325 of which must be attained at the graduate level. The program must provide sufficient breadth and depth of opportunities for students to obtain a variety of clinical education experiences in different work settings, with different populations, and with appropriate equipment and resources in order to acquire and demonstrate skills across the scope of practice in speech-language pathology, sufficient to enter professional practice.

It is the responsibility of the program to plan a clinical program of study for each student. The program must demonstrate that it has sufficient agreements with supervisors or preceptors and clinical sites to provide each student with the clinical experience necessary to prepare them for independent professional practice. It is the program's responsibility to design, organize, administer, and evaluate the overall clinical education of each student.

The program must provide an academic and clinical curriculum that is sufficient for students to acquire and demonstrate, at a minimum, knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases.

The program must provide opportunities for students to acquire and demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences, as well as swallowing disorders, including etiologies, characteristics, and

anatomical/physiological, acoustic, psychological, developmental, linguistic, and cultural correlates. These opportunities must be provided in the following areas:

- Articulation
- Fluency
- Voice and resonance, including respiration and phonation
- Receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities
- Hearing, including the impact on speech and language
- Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding; orofacial myofunction)
- Cognitive aspects of communication (e.g., attention, memory, sequencing, problem solving, executive functioning)
- Social aspects of communication (e.g., behavioral and social skills affecting communication)
- Communication modalities (e.g., oral, manual, and augmentative and alternative communication techniques and assistive technologies)

The program must provide opportunities for students to acquire and demonstrate knowledge in the following areas:

- Principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders across the life span, including consideration of anatomical/physiological, psychological, developmental, linguistic, and cultural correlates of the disorders
- Standards of ethical conduct
- Interaction and interdependence of speech, language, and hearing in the discipline of human communication sciences and disorders
- Processes used in research and the integration of research principles into evidence-based clinical practice
- Contemporary professional issues
- Certification, specialty recognition, licensure, and other relevant professional credentials

The program must provide opportunities for students to acquire and demonstrate skills in the following areas:

- Oral and written or other forms of communication
- Prevention, evaluation, and intervention of communication disorders and swallowing disorders
- Interaction and personal qualities, including counseling, collaboration, ethical practice, and professional behavior
- Effective interaction with patients, families, professionals, and other individuals, as appropriate
- Delivery of services to culturally and linguistically diverse populations
- Application of the principles of evidence-based practice
- Self-evaluation of effectiveness of practice

3.2B Academic and clinical education reflects current knowledge, skills, technology, and scope of practice. The curriculum is regularly reviewed and updated. The diversity of society is reflected throughout the curriculum.
The program must provide evidence that the curriculum is regularly and systematically evaluated and updated to reflect current knowledge and scope of practice in the profession. Sensitivity to issues of diversity should be infused throughout the curriculum. Evidence of regular and systematic evaluation may include institutional program evaluations, exit interviews, alumni and employer input, and faculty and administrative review of student performance and outcomes.

3.3B The scientific and research foundations of the profession are evident in the curriculum.
The program must demonstrate how it verifies that students obtain knowledge in the basic sciences (e.g., biological, behavioral, physical science, and mathematics), basic science skills (e.g., scientific methods and critical thinking), and the basic communication sciences (e.g., acoustics, physiological and neurological processes of speech, language, and hearing; linguistics). The curriculum must provide opportunities for students to become knowledgeable consumers of research literature. The curriculum must reflect the scientific bases of the professions and include research methodology, research literature, and opportunities to participate in research and scholarship activities, consistent with the mission and goals of the program and institutional expectations.

3.4B The academic and clinical curricula reflect an appropriate sequence of learning experiences.
The program must provide evidence of appropriate sequencing of course work and clinical education. Appropriate sequencing must be evident in examples of typical programs of study, including clinical placements.

3.5B Clinical supervision is commensurate with the clinical knowledge and skills of each student, and clinical procedures ensure that the welfare of each person served by students is protected, in accord with recognized standards of ethical practice and relevant federal and state regulations.
The program must demonstrate how the nature and amount of supervision are determined and adjusted to reflect the competence of each student. The program's written policies must describe the extent to which students are supervised and have access to supervisor or preceptor consultation when providing services to client/patients. Procedures for client/patient safety, confidentiality, and security

of client/patient records must also be clearly described in the program's written policies, in accordance with relevant federal and state regulations. Ethical standards must be clearly documented in the program's published materials.

3.6B Clinical education obtained in external placements is governed by agreements between the program and the external facility and is monitored by the program faculty.
The program must provide examples of its written agreements with external facilities, its policies regarding the identification and ongoing evaluation of external facilities, procedures for selecting and placing students in external clinical sites, and evidence that clinical education in external facilities is monitored by the program to ensure that educational objectives are met.

3.7B The clinical education component of the curriculum provides students with access to a client/patient base that is sufficient to achieve the program's stated mission and goals and includes a variety of clinical settings, client/patient populations, and age groups.
The program must describe how it ensures that each student is exposed to a variety of populations across the life span and from culturally and linguistically diverse backgrounds. Clinical education must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities. The program must provide information about the size and diversity of the client/patient base and describe the clinical populations available in the facilities where students are placed.

3.8B The program must provide evidence that all curriculum standards are met, regardless of mode of delivery.
Distance education and other modes of education delivery must be examined to ensure that the course work and clinical education are equivalent to that offered in the existing program, including number of credits, availability and sequencing of courses, supervision, coordination of placements with external facilities, and diversity of client/patient population. The overall quality of the program must be equivalent across modes of delivery.

Standard 4.0 Students
4.1 The program criteria for accepting students for graduate study in audiology and/or speech-language pathology meet or exceed the institutional policy for admission to graduate study.
The program's criteria for admission must meet or exceed those of the institution and be appropriate for the degree being offered. The admissions standards of the program and of the institution must be described and a rationale presented for any differences between the two sets of criteria. Policies regarding any exceptions to the criteria (such as "conditional" status) must be clearly explained and consistently followed.

4.2 The program makes reasonable adaptations in curriculum, policies, and procedures to accommodate differences among individual students.
The program must provide evidence that its curriculum and its policies and procedures for admission, internal and external clinical placements, and retention of students reflect a respect for and understanding of cultural and individual diversity. The program must provide its policy regarding proficiency in English and/or other language of service delivery and all other performance expectations.

4.3 Students are informed about the program's policies and procedures, degree requirements, requirements for professional credentialing, and ethical practice. Students are informed about documented complaint processes.
Programs may provide this information to students through student handbooks or other written means. The program must maintain a record of student complaints and make these available to the CAA upon request. Students must be made aware of the contact information for the CAA in the event they wish to file a complaint related to the program's compliance with standards for accreditation.

4.4 Students receive advising on a regular basis that pertains to both academic and clinical performance and progress. Students also are provided information about student support services.
The program must describe how students are advised on a timely and continuing basis regarding their academic and clinical progress. In addition, the program must describe how students receive information about the full range of student support services available at the institution.

4.5 The program must provide evidence that all student standards are met, regardless of mode of delivery for curriculum.
The program must ensure that students enrolled in distance education or other modes of education delivery are held to equivalent access to advising, student support services, and program resources.

Standard 5.0 Assessment
5.1 The program conducts ongoing and systematic formative and summative assessment of the performance of its current students.
The program identifies student learning outcomes and uses a variety of assessment techniques, administered by a range of program faculty and supervisors or preceptors, to evaluate students' progress. Students are provided regular feedback about their progress in

achieving the expected knowledge and skills in all academic and clinical components of the program, including all off-site experiences. The program documents the feedback mechanisms (e.g., grade definitions, performance rubrics) used to evaluate students' performance and applies those mechanisms consistently. The program documents guidelines for remediation (e.g. repeatable courses and/or clinical experiences, provisions for re-taking examinations) and implements remediation opportunities consistently.

5.2 The program documents student progress toward completion of the graduate degree and professional credentialing requirements and makes this information available to assist students in qualifying for certification and licensure.
The program must maintain accurate and complete records throughout each student's graduate program. It is advisable that forms or tracking systems be developed and used for this purpose. Responsibility for the completion of the records and timetable for completion must be clearly established. Records must be readily available to students upon request. Records must be available to program graduates in accordance with the institution's and program's policies for retention of student information, and those policies must be described. The program must maintain documentation on each student in sufficient detail so that completion of all academic and clinical requirements can be verified.

5.3 The program conducts regular and ongoing assessments of program effectiveness and uses the results for continuous improvement.
The program must document the procedures followed in evaluating the quality, currency, and effectiveness of its graduate program and the process by which it engages in systematic self-study. The documentation must indicate the mechanisms used to evaluate each program component, the schedule on which the evaluations are conducted and analyzed, and the program changes and/or improvements that have resulted from assessments.

The program collects and evaluates data on its effectiveness from multiple sources (e.g., students, alumni, faculty, employers, off-site supervisors or preceptors, community members, persons served). The data must include students' and graduates' evaluations of courses and clinical education.

Although many types of data may be used, the following measures of student achievement are required and will be evaluated relative to established benchmarks:

- Percentage of students passing the Praxis examinations by year
- Percentage of students completing the program within the program's published time frame
- Percentage of program graduates employed in the profession or pursuing further education in the profession within 1 year of graduation

These required student achievement measures must be presented to the public in program information materials (e.g. Web site, brochures) that are regularly updated and readily available.

Results of the assessments must be used to plan and implement program improvements that are consistent with the program's mission and goals.

5.4 The program regularly evaluates all faculty members and faculty uses the results for continuous improvement.
The program must describe the mechanism for regular evaluation of its faculty by program leadership (e.g. director, chair, evaluation committee) in accordance with institutional policy and guidelines. Students also must have the opportunity to evaluate faculty in all academic and clinical settings on a regular and ongoing basis. The program must demonstrate how results of all evaluations are communicated to the faculty and used to improve performance.

Standard 6.0 Program Resources
6.1 The institution provides adequate financial support to the program so that the program can achieve its stated mission and goals.
The program must provide evidence that budgetary allocations received for personnel, space, equipment, research support, materials, and supplies are regular, appropriate, and sufficient for its operations.

6.2 The program has adequate physical facilities (classrooms, clinical space, research laboratories) that are accessible, appropriate, safe, and sufficient to achieve the program's mission and goals.
The program must demonstrate that its facilities are adequate and reflect contemporary standards of ready and reasonable access and use. This includes accommodations for the needs of persons with disabilities consistent with the mandates of the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973.

6.3 The program's equipment and educational/clinical materials are appropriate and sufficient to achieve the program's mission and goals.
The program must provide evidence that the amount, quality, currency, and accessibility of equipment and materials are sufficient to meet program goals and that the equipment is maintained in good working order. The program must provide evidence of calibration

of equipment on a regular schedule, including evidence that the equipment meets standards specified by the manufacturer, the American National Standards Institute, or other appropriate agencies.

6.4 The program has access to clerical and technical staff, support services, and library and technology resources that are appropriate and sufficient to achieve the program's mission and goals.
The program must demonstrate access to appropriate and sufficient resources for faculty and students, such as library resources, interlibrary loan services, access to the Internet, computer and laboratory facilities, and support personnel. The program must describe how the adequacy of support is evaluated and how these resources are addressed in the program's strategic plan.

http://www.asha.org/Academic/accreditation/accredmanual/section3.htm

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