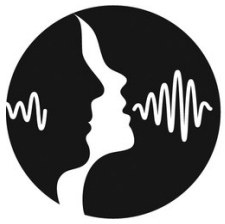

ASHA
American
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Association

PREFERRED PRACTICE PATTERNS FOR THE PROFESSION OF SPEECH-LANGUAGE PATHOLOGY

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ABOUT THIS DOCUMENT

Approved by the ASHA Legislative Council, November 2004

PREAMBLE TO THE PREFERRED PRACTICE PATTERNS FOR THE PROFESSION OF SPEECH- LANGUAGE PATHOLOGY

This revision was completed by the Ad Hoc Committee for the Review and Revision as Needed of the Preferred Practice Patterns for the Profession of Speech- Language Pathology, which was appointed in 2003. Members of the committee include Ron Gillam (chair), Tempii Champion, Leora Cherney, Nickola Nelson, Mark Ylvisaker, and Janet Brown (ex officio). Celia Hooper, 2003–2005 vice president for professional practices in speech-language pathology, served as monitoring vice president. The committee is indebted to many ASHA members who contributed their expertise in the development or review of this document, including John Riski, Larry Shriberg, Teri Bellis, Alina de la Paz, Travis Threats, and the steering committees of the Special Interest Divisions, and to ASHA staff members from the speech-language pathology and audiology professional practices and multicultural affairs units for their careful review.

PREAMBLE

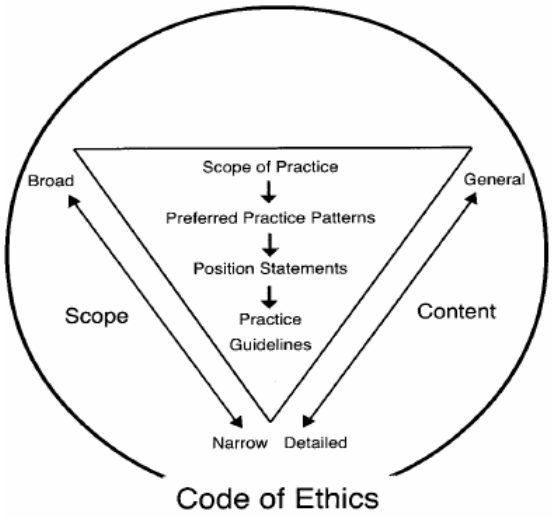
The American Speech-Language-Hearing Association (ASHA) established the *Preferred Practice Patterns for the Profession of Speech-Language Pathology* to enhance the quality of professional services. These statements were developed as a guide for ASHA-certified speech-language pathologists and as an educational tool for other professionals, members of the general public, consumers, administrators, regulators, and third-party payers. The practice patterns apply across all settings in which the procedure is performed and are to be used with sensitivity to and knowledge of cultural and linguistic differences and the individual preferences and needs of clients/patients and their families. In publishing these statements, ASHA does not intend to exclude members of other professions or related fields from rendering services within their scope of practice for which they are competent by virtue of education and training.

The Preferred Practice Patterns provide an informational base to promote delivery of quality patient/client care. They are sufficiently flexible to permit both innovation and acceptable practice variation, yet sufficiently definitive to guide practitioners in decision making for appropriate clinical outcomes. They further provide a focus for professional preparation, continuing education, and research activities. However, the Preferred Practice Patterns are neither a yardstick to measure acceptable conduct nor a set of aspirational principles. Rather, they reflect the normally anticipated professional response to a particular

set of circumstances. There may be legitimate reasons for departing from the practice patterns. The ultimate judgment regarding the appropriateness of any given procedure is made by the speech-language pathologist in light of individual circumstances often based on collaborative decision making with the client/patient, family/caregivers, and other professionals. Practitioners, however, need to be aware of the Preferred Practice Patterns, carefully considering the justifications for alternative practices.

These generic and universally applicable practice patterns were developed to be consistent with the World Health Organization's *International Classification of Functioning, Disability and Health* (WHO, 2001) as well as the framework of the *Scope of Practice for Speech-Language Pathology* (ASHA, 2001). For each procedure, the *Preferred Practice Patterns for the Profession of Speech-Language Pathology* specify the professionals who perform the procedure, expected outcome (s), clinical indications for the procedure, clinical processes, setting and equipment specifications, safety and health precautions, and documentation. Adherence, however, to the *Preferred Practice Patterns for the Profession of Speech-Language Pathology* does not guarantee a desired outcome.

It is useful to regard these practice patterns within a conceptual framework of ASHA policy statements that range in scope and specificity. Figure 1 illustrates these categories of policy statements for professional practice from broad to narrow in scope, and general to detailed in content, within the context of the ASHA *Code of Ethics* (2003). These categories are defined as follows:



- Scope of Practice Statement: A list of professional activities that define the range of services offered within the profession of speech-language pathology.

- Preferred Practice Patterns: Statements that define generally applicable characteristics of activities directed toward individual patients/clients and that address structural requisites of the practice, processes to be carried out, and expected outcomes.
- Position Statements: Statements that specify ASHA's policy and stance on a matter that is important not only to the membership but also to other outside agencies or groups.
- Practice Guidelines: A recommended set of procedures for a specific area of practice, based on research findings and current practice. These procedures detail the knowledge, skills, and/or competencies needed to perform the procedures effectively.

In applying the practice patterns, all ASHA members and ASHA-certified professionals are bound by the ASHA Code of Ethics. All professional activity is consistent with the Code of Ethics. Particularly relevant to clinical practice are those provisions for holding paramount the welfare of persons served and providing only those clinical services for which one is competent, considering education, training, and experience.

The original Preferred Practice Patterns (approved by the ASHA Legislative Council in 1992) addressed the professions of speech-language pathology and audiology and were the product of extensive peer review by all segments of the professions of speech-language pathology and audiology. In clinical areas of controversy, working groups were formed to reach consensus on accepted practice patterns. The 1997 version and the current version of the *Preferred Practice Patterns for the Profession of Speech-Language Pathology* address only the profession of speech-language pathology and were revised by an ad hoc committee of ASHA members in collaboration with expert members as individuals or groups. Each version was circulated for select and widespread peer review by speech- language pathologists and audiologists. As a result, the practice patterns represent the consensus of the members of the professions after they considered available scientific evidence, existing ASHA and related policies, current practice patterns, expert opinions, and the collective judgment and experience of practitioners in the field. Requirements of federal and state governments and accrediting and regulatory agencies also have been considered.

The Preferred Practice Patterns reflect current practice based on available knowledge. Because speech-language pathology is a dynamic and continually developing profession, advances are expected to change current practice patterns. Similarly, advances in educational and health care policy and practices influence professional practices. The practice patterns are updated periodically to reflect new clinical, scientific, and technological developments that occur inside and outside the profession of speech-language pathology.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1987). Classification of speech- language pathology and audiology procedures and communication disorders. *Asha, 29*, 49–53.

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FUNDAMENTAL COMPONENTS AND GUIDING PRINCIPLES

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

- Speech-language pathologists providing specific services hold the appropriate credentials, including ASHA certification, and have pertinent training and experience.
- Speech-language pathology assistants who provide screening and/or intervention services do so under the supervision of an ASHA-certified speech- language pathologist (in accordance with the current *Guidelines for the Training, Credentialing, Use, and Supervision of Speech-Language Pathology Assistants*). The speech-language pathologist who supervises speech-language pathology assistants maintains full responsibility for the quality and appropriateness of services provided to the patient/client.
- Speech-language pathologists may provide services as part of a collaborative team.

EXPECTED OUTCOME(S)

- Comprehensive assessment, intervention, and support address the following components within the World Health Organization's *International Classification of Functioning, Disability, and Health* (2001) framework.
    - Body structures and functions:
        - Identify and optimize underlying anatomic and physiologic strengths and weaknesses related to communication and swallowing effectiveness. This includes mental functions such as attention as well as components of communication such as articulatory proficiency, fluency, and syntax.
    - Activities and participation, including capacity (under ideal circumstances) and performance (in everyday environments):
        - Assess the communication and swallowing-related demands of activities in the individual's life (contextually based assessment);
        - Identify and optimize the individual's ability to perform relevant/ desired social, academic, and vocational activities despite possible ongoing communication and related impairments;
        - Identify and optimize ways to facilitate social, academic, and vocational participation associated with the impairment.
    - Contextual factors, including personal factors (e.g., age, race, gender, education, lifestyle, and coping skills) and environmental factors (e.g., physical, technological, social, and attitudinal):

- Identify and optimize personal and environmental factors that are barriers to or facilitators of successful communication (including the communication competencies and support behaviors of everyday people in the environment).
- Services may result in a diagnosis of a communication disorder, identification of a communication difference, prognosis for change (in the individual or relevant contexts), intervention and support, evaluation of their effectiveness, and referral for other assessments or services as needed.
- Although the outcomes of speech, language, or hearing services may not be guaranteed, a reasonable statement of prognosis is made to referral sources, clients/patients, and families/caregivers.
- Outcomes of services are monitored and measured in order to ensure the quality of services provided and to improve the quality of those services.
- Appropriate follow-up services are provided to determine functional outcomes and the need for further services after discharge.

CLINICAL INDICATIONS

- Screening services are used to identify individuals with potential communication or swallowing disorders.
- Assessment services are provided as needed, requested, or mandated or to rule in or out a specific disabling condition.
- Intervention and consultation services are provided when there is a reasonable expectation of benefit to the patient/client in body structure/function and/or activity/participation.

CLINICAL PROCESS

- Comprehensive assessment, intervention, and support address the components within the World Health Organization's *International Classification of Functioning, Disability and Health* (2001) framework, as described previously.
- Services are consistent with the best available scientific and clinical evidence in conjunction with individual considerations.
- Assessment may be static (i.e., using procedures designed to describe structures, functions, and environmental demands and supports in relevant domains at a given point in time) or dynamic (i.e., using hypothesis testing procedures to identify potential for change and elements of successful interventions and supports).
- Services address patient/client and family preferences, goals, and special needs to enhance participation and improve functioning in life activities that the patient/client, family, and others

deem important. Materials and approaches have ecological validity in that they are appropriate to the patient's/client's chronological and developmental ages; medical status; physical and sensory abilities; education; vocation; cognitive status; and cultural, socioeconomic, and linguistic backgrounds.

- Counseling and consultation are essential components that address the nature and impact of the disorder or difference and engage the patient/client, family/ caregiver, and others (e.g., teachers, employers, peers) in the clinical process, as appropriate.
- Services may include instruction of communication partners (e.g., family/ caregivers, peers, educators) in how to facilitate functioning, remove communication barriers, and enhance participation.
- A variety of service delivery models and supports may be utilized, including direct service (e.g., pullout, individual, small group, classroom, community settings); indirect service through consultation and collaboration; service by support personnel with appropriate supervision; service by transdisciplinary or interdisciplinary teams; and service mediated by technology (e.g., telepractice).

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

- Settings for assessment, intervention, and support are selected on the basis of intervention goals and in consideration of the World Health Organization (WHO) framework described above. There is a plan to generalize and maintain intervention gains that includes references to relevant settings and activities.
- Telepractice (i.e., telehealth) may be used, when appropriate, to overcome barriers to accessing service caused by distance, unavailability of specialists and subspecialists, or impaired mobility.
- All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and infectious disease transmission).
- Equipment is maintained according to manufacturer's specifications and recommendations. Instruments are properly calibrated, and calibration records are maintained.
- Decontamination (e.g., cleaning, disinfection, or sterilization) of multiple-use equipment before reuse is carried out according to facility-specific infection control policies and manufacturer's instructions.

DOCUMENTATION

- Speech-language pathologists prepare, sign, and maintain, within an established time frame, documentation that reflects the nature of the professional service.
- Results of assessment and treatment are reported to the patient/client and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.
- The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.
- Except for screenings, documentation addresses the type and severity of the communication or related disorder or difference, associated conditions (e.g., medical or educational diagnoses) and impact on activity and participation (e.g., educational, vocational, social).
- Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1985, June). Clinical management of communicatively handicapped minority language populations. *Asha, 27*(6).

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#1. SPEECH-LANGUAGE SCREENING—CHILDREN

Speech-language screening in the pediatric population is a pass/fail procedure to identify infants, toddlers, children, or adolescents who require further speech- language/communication assessment or referral to other professional and/or medical services.

Pediatric speech-language screening is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Pediatric speech-language screening is conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

EXPECTED OUTCOME(S)

Pediatric speech-language screening identifies infants, toddlers, children, or adolescents likely to have speech-language and communication impairments that may interfere with body structure/function and/or activity/participation as defined by the World Health Organization (WHO) (see *Fundamental Components and Guiding Principles*).

Screening services result in pass/fail decisions and may result in —

- recommendations for supporting normal development and preventing speech language impairment;
- referral for comprehensive speech-language assessment or other assessments or services;
- plans to monitor development.

CLINICAL INDICATIONS

Pediatric speech-language screening services are provided to infants, toddlers, children, adolescents, and their families as needed, requested, or mandated, or when other evidence suggests that they have risks for speech-language disorders associated with their body structure/function and/or activities/participation.

CLINICAL PROCESS

Pediatric speech-language screening services are provided with parental consent as mandated by federal, state, and or local regulations.

Screening services are sensitive to cultural and linguistic diversity. Screening includes a range of age-appropriate, speech-language and other communication functions and activities.

Standardized (e.g., normed screening tests) or nonstandardized methods (e.g., criterion-referenced assessments, parent interviews, classroom observations) are used to screen oral motor function, communication and social interaction skills, speech production skills, comprehension and production of spoken and written language (as age-appropriate), and cognitive aspects of communication.

Screening typically focuses on body structures/functions but may also address activities/participation, and contextual factors affecting communication.

Individuals who fail the screening are referred to a speech-language pathologist for further assessment.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Pediatric speech-language screening is conducted in a clinical or educational setting or other natural environment conducive to valid screening results. Settings for screening may include hospitals, clinics, schools, or homes.

Equipment Specifications: All equipment used for pediatric speech-language screening is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All screening services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease).

Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes a statement of identifying information, screening results, and recommendations, indicating the need for rescreening, assessment, or for a referral.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of screening are reported to child's family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1988, March). Prevention of communication disorders: Position statement. *Asha, 30*, 90.

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

American Speech-Language-Hearing Association. (2004). Admission/discharge criteria in speech-language pathology. *ASHA Supplement 24*, 65–70.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#2. SPEECH-LANGUAGE SCREENING—ADULTS

Speech-language pathology screening in adults is a pass/fail procedure to identify individuals who require further speech, language, and/or cognitive assessment or referral for other professional and/or medical services.

Speech-language pathology screening in adults is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Screening is conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

EXPECTED OUTCOME(S)

Speech-language pathology screening identifies persons who are likely to have speech, language, and cognitive impairments that may interfere with body structure/function and /or activity/participation as defined by the World Health Organization (see *Fundamental Components and Guiding Principles*).

Screening may result in recommendations for rescreening, comprehensive speech, language, or cognitive-communication assessment, or in a referral for other examinations or services.

CLINICAL INDICATIONS

Adults of all ages are screened as needed, requested, or mandated, or when other evidence suggests that they are at risk for speech, language, or cognitive- communication disorders involving body structure/function and/or activities/participation.

CLINICAL PROCESS

Standardized and nonstandardized methods are used to screen oral motor function, speech production skills, comprehension and production of spoken and written language, and cognitive aspects of communication. Services are sensitive to cultural and linguistic diversity. Screening typically focuses on body structures/ functions, but may also address activities/participation, and contextual factors affecting communication.

Individuals who fail screenings are referred to speech-language pathologists for further assessment.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Screening is conducted in a clinical or natural environment conducive to eliciting a representative sample of the patient's/client's speech, language, and cognitive-communication functions and activities.

Equipment Specifications: All equipment is used and maintained in accordance with manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and procedures and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes a statement of identifying information, screening results, and recommendations, indicating the need for rescreening, assessment, or referral.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

Results of screening are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1988). Position statement: Prevention of communication disorders. *Asha, 30*(3), 90.

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#3. SWALLOWING SCREENING

Swallowing screening is a pass/fail procedure to identify individuals who require a comprehensive assessment of swallowing function or a referral for other professional and/or medical services.

Screening is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Swallowing screening is conducted by appropriately credentialed and trained speech-language pathologists.

EXPECTED OUTCOME(S)

Swallowing screening identifies persons who are likely to have swallowing impairments related to function, activity, and/or participation as defined by the World Health Organization (see *Fundamental Components and Guiding Principles*). Impairments may cause pulmonary aspiration, airway obstruction, or inadequate nutrition and/or hydration

Screening may result in recommendations for rescreening or comprehensive assessment of swallowing function, or in a referral for other examinations or services.

CLINICAL INDICATIONS

Individuals of all ages are screened as needed, requested, or mandated or when other evidence (e.g., neurological or structural deficits) suggests that they are at risk for a swallowing disorder involving body structure/function and/or activities/participation.

CLINICAL PROCESS

Screening services are sensitive to cultural and linguistic diversity. Screening may include the following:

- Interview or questionnaire that addresses swallowing function.
- Observation of the signs and symptoms of oropharyngeal swallowing dysfunction.
- Observation of routine or planned feeding situation, if indicated.
- Formulation of appropriate recommendations, including the need for a full swallow function assessment.
- Communication of results and recommendations to the team responsible for the individual's care.

Individuals who fail the screening are referred for a full swallow function assessment by a speech-language pathologist and/or other medical services as appropriate.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Screening is conducted in a clinical or natural environment conducive to obtaining valid screening results, which may include settings such as bedside, home, or hospice. Patient/client positioning and comfort, functional competencies, and environmental distractors are observed during routine or planned oral intake/ feeding.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All procedures ensure the safety of the patient/ client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and procedures and according to the manufacturer's instructions.

DOCUMENTATION

Documentation includes a statement of identifying information, screening results, and recommendations, indicating the need for rescreening, assessment, or referral.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of screening are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (2000). Guidelines for the roles and responsibilities of the school-based speech-language pathologist. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2001). Roles of speech-language pathologists in swallowing and feeding disorders: Technical report. ASHA 2002 Desk Reference, 3, 181–199.

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American Speech-Language-Hearing Association. (2004). Speech-language pathologists training and supervising other professionals in the delivery of services to individuals with swallowing and feeding disorders: Position statement. ASHA Supplement 24, 62.

American Speech-Language-Hearing Association. (2004). Speech-language pathologists training and supervising other professionals in the delivery of services to individuals with swallowing and feeding disorders: Technical report. ASHA Supplement 24, 131– 134.

World Health Organization. (2001). International classification of functioning, disability and health. Geneva, Switzerland: Author.

#4. AUDIOLOGIC SCREENING

Audiologic screening services are limited to pure-tone air conduction screening and screening tympanometry for initial identification and/or referral purposes. These are pass/fail procedures to identify individuals who require referral for further audiologic assessment or other professional and/or medical services.

Audiologic screening is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Audiologic screening is conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

EXPECTED OUTCOME(S)

Audiologic screening identifies those persons who are likely to have hearing impairments or disorders that may interfere with body function/structure and/or activity/participation as defined by the World Health Organization (WHO) (see *Fundamental Components and Guiding Principles*).

Screening may result in recommendations for rescreening, or referral for comprehensive audiologic assessment or other medical examinations or services.

CLINICAL INDICATIONS

Audiologic screening services are provided to children or adults as needed, requested, or mandated or when other evidence suggests risk for hearing impairments affecting body structure/function, activities, or participation.

CLINICAL PROCESS

Screening for hearing impairment consists of pure tones presented via earphones at 1000, 2000, and 4000 Hz at 20 dB HL for children (ages 3–18) via conventional or conditioned play audiometry, and at 25 dB HL for adults.

- Patients/clients who do not respond at any frequency in either ear are rescreened.
- Patients/clients who fail the rescreen are referred to an audiologist for an audiologic evaluation.

Screening for outer and middle ear disorders in children (birth-18 years) includes visual inspection, otoscopic examination, and screening tympanometry.

- Patients/clients who fail the screening are rescreened.
- Patients/clients who fail the rescreening are referred for medical and/or audiologic follow-up.

Screening for hearing disability is conducted by interview, case history, and/or questionnaire.

- Patients/clients who fail the screening are referred for audiologic assessment.

Screening services are sensitive to cultural and linguistic diversity.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Screening is conducted in a clinical or natural environment conducive to obtaining valid screening results. Settings for screening may include hospitals, clinics, schools, homes, or hospice facilities. Ambient noise levels may not always meet ANSI standards for pure-tone threshold testing but are sufficiently low to allow accurate screening.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications. Electroacoustic equipment meets ANSI and manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes a statement of identifying information, screening results, and recommendations, indicating the need for rescreening, assessment, or referral.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of screening are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

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American National Standards Institute. (1987). Specifications for instruments to measure aural acoustic impedance and admittance (aural acoustic immittance). In New York: Acoustical Society of America.

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American Speech-Language-Hearing Association. (2004). Clinical practice by certificate holders in the profession in which they are not certified. *ASHA Supplement 24*, 39–42.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#5. CONSULTATION

Consultation is a service related to speech-language, communication, and swallowing issues, including collaborating with other professionals, family/ caregivers, and patients/clients; working with individuals in business, industry, education, and other public and private agencies; engaging in program development, supervision, or evaluation activities; or providing expert testimony.

Consultation is conducted according to the Fundamental Components and Guiding Principles.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Consultation is provided by appropriately credentialed and trained speech- language pathologists.

Speech-language pathologists may provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, or other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOMES

Goals and expectations of consultation are variable and are negotiated between the consultant and those seeking consultation. The consultant collaborates in joint problem solving to address mutual goals. Information is sought about the perceptions and priorities of those involved in the consultation process.

Information is shared regarding communication development and processes, speech-language and communication impairments and related disorders, assessment and intervention strategies, and other issues related to the goals of the consultation.

CLINICAL INDICATIONS

Consultation services are provided by arrangement or upon request and address situations such as the following:

- Prevention of communication disorders.
- Identification of persons at risk for communication disorders.
- Assessment and intervention plans and procedures and interpretation of results.
- Monolingual English language speakers providing services to clients who speak languages other than English.
- Environmental assessment and modification.
- Equipment and material needs and/or modifications.
- Program evaluation and management.
- Quality assessment and improvement.

- Education and advocacy.
- Second opinion and/or independent educational evaluation.
- Expert testimony.

CLINICAL PROCESS

Consulting activities take many forms. As appropriate to the situation, the consultant –

- collaborates with others to develop mutual goals for the consultation activity;
- gathers information through observations, interviews, assessments or other direct services, and through review of records and materials;
- assesses the type and extent of assistance required;
- makes recommendations or provides information;
- provides training on communication and swallowing issues;
- provides monitoring and follow-up services;
- provides information to federal and state government agencies, business, and industry;
- provides expert testimony regarding speech-language and communication issues.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Consultation services are offered to individuals, families, groups, and organizations in home, health care, education, business, industrial, government, and legal settings.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All procedures ensure the safety of the patient/ client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and procedures and according to manufacturer's instructions.

DOCUMENTATION

The consulting speech-language pathologist provides written plans and/or reports as documentation of services rendered as indicated in the agreement made between the parties.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1991). A model for collaborative service delivery for students with language-learning disorders in the public schools. *Asha, 33*(Suppl. 5), 44–50.

American Speech-Language-Hearing Association. (1994). Professional liability and risk management for the audiology and speech-language pathology professions. *Asha, 36* (Suppl. 12), 25–38.

American Speech-Language-Hearing Association. (1995). Position statement and guidelines on acoustics in educational settings. *Asha, 37*(Suppl. 14), 15–19.

American Speech-Language-Hearing Association. (2002). *A workload analysis approach for establishing speech-language caseload standards in the schools: Technical report*. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2003). Appropriate school facilities for students with speech-language-hearing disorders: Technical report. *ASHA Supplement 23*, 83–86.

American Speech-Language-Hearing Association. (2003). Knowledge and skills in business practices needed by speech-language pathologists in health care settings. *ASHA Supplement, 23*, 87–92.

American Speech-Language-Hearing Association. (2004). Knowledge and skills in business practices for speech-language pathologists who are managers and leaders in health care organizations. *ASHA Supplement 24*, 146–151.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#6. COUNSELING

Counseling provides individuals, families/caregivers, and other relevant persons with information and support about communication and/or swallowing disorders to develop problem-solving strategies that enhance the (re)habilitation process.

Counseling is conducted according to the Fundamental Components and Guiding Principles.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Counseling is conducted by appropriately credentialed and trained speech- language pathologists.

Speech-language pathologists may provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, psychologists, social workers, physicians).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, counseling is designed to—

- assist individuals to develop appropriate goals related to a communication or swallowing disorder that capitalize on strengths and address weaknesses related to underlying structures and functions that affect communication/ swallowing;
- facilitate the individual's activities and participation by assisting the person to increase autonomy, self-direction, and responsibility for acquiring and utilizing new skills and strategies that are related to their goals to communicate or swallow more effectively;
- assist individuals in understanding how to modify contextual factors to reduce barriers and enhance facilitators of successful communication/swallowing and participation.

Counseling is expected to result in improved abilities, functioning, participation, and contextual facilitators. Counseling also may result in recommendations for speech-language or swallowing reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Counseling is prompted by referral and/or by the results of a communication or swallowing assessment. Individuals of all ages may receive counseling as part of intervention and/or consultation services when their ability to communicate or swallow effectively is impaired and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Counseling may be warranted even if the prognosis for improved body structure/ function is limited.

CLINICAL PROCESS

Counseling involves providing timely information and guidance to patients/clients, families/caregivers, and other relevant persons about the nature of communication or swallowing disorders, the course of intervention, ways to enhance outcomes, coping with disorders, and prognosis. Services are sensitive to cultural and linguistic diversity.

Depending on assessment results, counseling addresses the following:

- Assessment of counseling needs.
- Provision of information.
- Use of strategies to modify behavior and/or the individual's environment.
- Development of coping mechanisms and systems for emotional support.
- Development and coordination of individual and family self-help and support groups.

Speech-language pathologists are responsible for ensuring that individuals, families/caregivers, and other relevant persons receive counseling about communication and swallowing issues. Referrals to and consultation with mental health professionals may be an integral component of counseling.

Counseling extends long enough to accomplish stated objectives/predicted outcomes. The counseling period does not continue past the point at which there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Counseling is conducted in clinical and educational settings and other natural environments that are conducive to individual and family comfort, confidentiality, and uninterrupted privacy. Settings are selected with consideration for the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, counseling addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's communication or swallowing.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of counseling services that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of counseling outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Education Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (2000). Guidelines for the roles and responsibilities of the school-based speech-language pathologist. In Rockville, MD: Author.

American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists providing services to infants and families in the NICU environment. *ASHA Supplement 24*, 159–165.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Guidelines. Available from https://www.asha.org/policy/.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Position statement. *ASHA Supplement 24*, 60–61.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Technical report. *ASHA Supplement 24*, 121–130.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#7. FOLLOW-UP PROCEDURES

Follow-up procedures are used to complete or supplement an assessment, monitor progress during intervention, and/or determine status after screening, assessment, intervention, or discharge.

Follow-up procedures are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PERFORM THE PROCEDURE(S)

Follow-up procedures are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

EXPECTED OUTCOME(S)

Follow-up procedures complete an assessment and determine reassessment needs.

Follow-up procedures determine efficacy of intervention, functional outcomes, maintenance of level of function achieved at the end of intervention, and appropriateness of clinical decisions and clinical recommendations.

Follow-up procedures may result in recommendations for continued or repeated assessment and/or intervention, referral for other examinations or services, dismissal from services, or readmission to services.

CLINICAL INDICATIONS

Follow-up services are provided to individuals of all ages at a predetermined time following screening, assessment, or intervention, and as required by federal, state, or local regulations.

CLINICAL PROCESS

Standardized and nonstandardized methods are used to determine the individual's current status including body structures/functions, activities/participation, contextual factors affecting communication and swallowing, and level of satisfaction with services consistent with the World Health Organization (WHO) framework.

Follow-up procedures are conducted either in person (e.g., interview, reassessment) or indirectly (e.g., phone or mail surveys), and involve the patient/ client, family/caregivers, professionals, and/or others associated with the individual. Follow-up procedures are sensitive to cultural and linguistic diversity.

Services include the following:

- Supplemental evaluations.
- Re-evaluations and rechecks.
- Telephone contacts with patients/clients and/or referral agencies.
- Verbal or written consultation with other professionals to monitor a patient's/ client's functional communication or swallowing status and contextual factors.

Materials and approaches are appropriate to the individual's chronological and developmental ages, medical status, physical and sensory abilities, education, vocation, cognitive status, and cultural, socioeconomic, and linguistic backgrounds.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Follow-up procedures are conducted in a clinical or educational setting, or other natural environment. Selection of settings for follow-up are based on the goals of assessment with consideration of the WHO framework.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are

carried out according to facility-specific infection control policies and procedures and manufacturer's instructions.

DOCUMENTATION

Documentation includes a statement of pertinent background information, results, progress, and recommendations, indicating the need for reassessment, continued or additional intervention, or referral.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Education Right to Privacy Act (FERPA), and other state and federal laws.

Results of the follow-up are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1988). Position statement: Prevention of communication disorders. *Asha, 30*(3), 90.

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#8. PREVENTION SERVICES

Prevention services are designed to avoid communication or swallowing disorders, minimize their effects and sequelae, and facilitate normal development.

Prevention is conducted according to the Fundamental Components and Guiding Principles.

INDIVIDUALS WHO PROVIDE THE SERVICES

Prevention services are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, prevention is designed to—

- inhibit or delay the onset of a communication or swallowing disorder by capitalizing on strengths, addressing weaknesses related to underlying structures and functions that may interfere with communication/swallowing, and facilitating normal development;
- minimize impact of risk factors, associated conditions, and sequelae to facilitate individuals' activities and level of participation;
- reduce exposure to contextual factors that may interfere with successful communication/swallowing activities and participation and provide appropriate accommodations and other supports, as well as training in how to use them.

Prevention is expected to result in a reduced risk for communication or swallowing disorders and their sequelae. Prevention also may result in recommendations for speech-language and communication or swallowing reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Prevention is prompted by referral, the results of a speech-language assessment, or other indications of need. Individuals of all ages may receive prevention services when they are deemed to be at risk for impaired ability to communicate effectively or swallow safely and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Prevention services that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/ function is limited.

CLINICAL PROCESS

Prevention involves providing information and guidance to patients/clients, families, other significant persons, or target groups about the risk for or ramifications of a communication or swallowing disorder with sensitivity to cultural and linguistic diversity.

Depending on the nature of the risk, prevention may involve—

- identifying and contacting target groups;
- establishing professional relationships;
- providing consultation and educational strategies:
    - Consultation may be provided to natural support systems, such as the family, or to direct service personnel, organizations, or policymaking groups.

- Education may provide general information about communication or swallowing processes, disorders, and intervention; specific information to help target groups identify and/or eliminate risk factors for the onset, development, or maintenance of a communication or swallowing disorder; or may improve target groups' ability to cope with communication disorders.

Prevention services extend long enough to accomplish stated objectives/predicted outcomes.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Prevention services are conducted in a clinical or educational setting and/ or other natural environments that are selected on the basis of prevention goals and in consideration of the social, academic and/or vocational activities that are relevant to or desired by individuals, families, groups, communities, or organizations. In any setting, prevention addresses the personal, cultural, and environmental factors that increase the risk of a communication or swallowing disorder.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All prevention services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of prevention services that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of prevention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1988). Prevention of communication disorders. *Asha, 30*(3), 90.

American Speech-Language-Hearing Association. (1991). The prevention of communication disorders tutorial. *Asha, 33*(Suppl. 6), 15–41.

American Speech-Language-Hearing Association. (2000). Guidelines for the roles and responsibility of school-based speech-language pathologists. In Rockville, MD: Author.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#9. ELECTIVE COMMUNICATION MODIFICATION

Elective communication modification services are for individuals who do not have a communication disorder but who wish to receive assistance from a speech- language pathologist to enhance their communication effectiveness.

Communication modification includes instruction in public speaking, accent modification, and interpersonal communication skills.

Communication modification is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Communication modification for adults is conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, communication modification is designed to—

- capitalize on strengths and address weaknesses related to functions that affect communication;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies;

- modify contextual factors that serve as barriers and enhance facilitators of successful communication and participation.

Communication modification is expected to result in reduced contextual barriers, improved abilities and contextual facilitators, and measurably enhanced functioning and participation. Communication modification services also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Communication modification is prompted by referral or upon request, including self-referral. Individuals of all ages may receive intervention and/or consultation services when there is an identified or perceived reduction in the ability to communicate effectively, and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation.

Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Communication modification services involve information and guidance to patients/clients, families, and other significant persons about communication, communication effectiveness, and the course of services.

Communication modification services address the complexities of communication effectiveness in a manner that is sensitive to cultural and linguistic diversity.

Depending on assessment results, communication modification may address the following:

- Knowledge and use of verbal and nonverbal pragmatic rules of communication in varied communication situations.
- Knowledge and application of phonological and prosodic differences.
- Use of effective listening skills.
- Knowledge of cultural influences on communication.
- Increased ability to use speech and language skills within academic, vocational, and social contexts.
- Analysis of the cognitive and communication demands of relevant social, academic, and/or vocational tasks and contexts, and subsequent appropriate strategies for modifying communication.
- Voice care and techniques for modulating intensity, pitch, and quality without inducing strain.
- Development of self-assessment and monitoring techniques.

- Development of plans, including referral, for problems such as hearing difficulties and emotional disturbance.

Communication modification services extend long enough to accomplish stated objectives/predicted outcomes and end when there is no longer any expectation for further benefit. Clinicians provide patients/clients and their families/caregivers with an estimate of the duration of communication modification services.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Communication modification services may be conducted in a variety of settings and are selected on the basis of intervention goals and in consideration of the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, communication modification addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's communication function. There is a plan to generalize and maintain communication gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Indication that the services were elective.
- Written records of the dates, length, and type of services that were provided.
- Evaluation of communication modification outcomes and effectiveness as applied to activities, participation, and contextual factors.
- Progress toward stated goals.
- Specific recommendations.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) the Family Education Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1983). Social dialects and implications of the position on social dialects. *Asha, 25*, 23–27.

American Speech-Language-Hearing Association. (1988, March). Prevention of communication disorders: Position Statement. *Asha, 30*, 90.

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

American Speech-Language-Hearing Association. (2003). Technical report: American English dialects. *ASHA Supplement 23*, 45–46.

American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists and audiologists to provide culturally and linguistically appropriate services. *ASHA Supplement 24*, 152–158.

American Speech-Language-Hearing Association Joint Subcommittee of the Executive Board on English Language Proficiency. (1998). Students and professionals who speak English with accents and nonstandard dialects: Issues and recommendations. Technical report. *ASHA, 40*(Suppl. 18), 28–31.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#10. COMPREHENSIVE SPEECH-LANGUAGE ASSESSMENT

Comprehensive speech-language assessment addresses speech, language, cognitive-communication and/or swallowing function (strengths and weaknesses) in children and adults, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Comprehensive speech-language assessment is conducted according to the *Fundamental Components and Guiding Principles.*

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Comprehensive speech-language assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators and medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying strengths and weaknesses related to speech, language, cognitive and/or swallowing factors that affect communication and swallowing performance;
- effects of speech, language, cognitive-communication and/or swallowing impairments on the individual's activities (capacity and performance in contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and swallowing and participation for individuals with speech, language, cognitive-communication and/or swallowing impairments.

Assessment may result in the following:

- Diagnosis of a speech, language, cognitive-communication and/or swallowing disorder.
- Clinical description of the characteristics of speech, language, cognitive- communication and/or swallowing impairments.
- Identification of a communication difference, possibly co-occurring with a speech, language, cognitive-communication and/or swallowing disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that they have speech, language, cognitive-communication and/or swallowing impairments affecting body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's medical status, educational performance, or by failing a speech-language or swallowing screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) and/or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history, including medical status, education, vocation, and socioeconomic, cultural, and linguistic backgrounds.
- Review of auditory, visual, motor, and cognitive status.
- Patient/client and family interview.
- Standardized and/or nonstandardized measures of specific aspects of speech, spoken and nonspoken language, cognitive-communication, and swallowing function.
- Analysis of associated medical, behavioral, environmental, educational, vocational, social, and emotional factors.
- Identification of potential for effective intervention strategies and compensations;
- Selection of standardized measures for speech, language, cognitive- communication and/or swallowing assessment with consideration for documented ecological validity.
- Follow-up services to monitor communication and swallowing status and ensure appropriate intervention and support for individuals with identified speech, language, cognitive-communication and/or swallowing disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting and/or other natural environments conducive to eliciting representative samples of the patient's/ client's capacities and performance in communication and swallowing. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to the manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations indicating the need for further assessment, follow-up, or referral. When intervention is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program) required.

Documentation addresses the type and severity of the speech, language, cognitive- communication or swallowing disorder and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Education Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1990). The roles of speech-language pathologists in service delivery to infants, toddlers, and their families. *Asha, 32*(Suppl. 2), 4.

American Speech-Language-Hearing Association. (1991). Guidelines for speech-language pathologists serving persons with language, sociocommunication, and/or cognitive- communication impairments. *Asha, 33*(Suppl. 5), 21–28.

American Speech-Language-Hearing Association. (2000). *Guidelines for roles and responsibilities for the school-based speech-language pathologist*. Rockville, MD: Author.

American Speech-Language-Hearing Association. (2001). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (position statement, executive summary of guidelines, technical report). In *ASHA Supplement 21* (pp. 17–28). Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists providing services to individuals with swallowing and/or feeding disorders. *ASHA Supplement 22*, 81–87.

American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists with respect to reading and writing in children and adolescents. *ASHA 2002 Desk Reference, 3*, 455–464.

American Speech-Language-Hearing Association. (2002). Roles of speech-language pathologists in swallowing and feeding disorders: Position statement. *ASHA Supplement 22*, 73.

American Speech-Language-Hearing Association. (2004). Admission/discharge criteria in speech-language pathology. *ASHA Supplement 24*, 65–70.

American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists providing services to individuals with cognitive- communication disorders. Available from https://www.asha.org/policy/.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the identification, diagnosis, and treatment of individuals with cognitive- communication disorders: Position statement. Available from https://www.asha.org/policy/.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#11. COMMUNICATION ASSESSMENT–INFANTS AND TODDLERS

Infant-toddler assessment is provided to evaluate strengths and weaknesses of early communication interactions and prespeech-language functioning in infants and toddlers, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Infant/toddler early communication and prespeech-language assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Infant/toddler assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying strengths and weaknesses related to factors that affect communication performance such as play, prespeech, babbling, jargon, early words and sentences, and communicative intent;
- effects of preschool communication impairments on the infant's/toddler's activities (capacity and performance in everyday communication contexts) and participation; such as day care and family/caretaker interaction;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for infants/toddlers with communication development risks.

Assessment may result in the following:

- Diagnosis of a communication disorder or high risk of developmental difficulties.
- Identification of a communication difference.
- Clinical description of the characteristics of the current level of communication development and/or impairment.
- Prognosis for change (in the infant/toddler and/or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments (e.g., swallowing and feeding) or services.

CLINICAL INDICATIONS

Assessment services are provided to infants/toddlers and their families as needed, requested, or mandated, or when other evidence suggests that the infant's/toddler's ability to communicate is impaired, or likely to be impaired, because of identified biological or other developmental risks involving their body structure/function and/or activities/participation.

Assessment is prompted by referral, by the infant's/toddler's medical or developmental status, or by failing a speech-language or hearing screening.

CLINICAL PROCESS

Comprehensive assessments are sensitive to persons from all culturally and linguistically diverse backgrounds and address the components within the WHO's *International Classification of Functioning,*

Disability and Health (2001) framework, including body structures/functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history, including medical status, and socioeconomic, cultural, and linguistic backgrounds.
- Review of auditory, visual, motor, and cognitive status.
- Standardized and/or nonstandardized methods selected with consideration for ecological validity, such as —
    - parent's response instruments and observational instruments that examine early communication, prespeech-language, and early speech-language behaviors;
    - criterion-referenced developmental scales;
    - description of samples of play behavior and nonverbal and early speech- language interactions with caregivers and others;
    - caregiver interviews;
    - contextualized behavioral and functional-communication observations.
- Follow-up services to monitor cognitive-communication-motor status and ensure appropriate intervention and support for infants/toddlers with identified communication impairments or high risks of communication developmental difficulties.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a Neonatal Intensive Care Unit (NICU), clinical, or natural environment conducive to eliciting a representative sample of the infant's/toddler's early communicative development. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings and interactions.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the infant/toddler and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before

reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, assessment results and interpretation, prognosis, and recommendations, and indicates the need for further assessment, follow-up, or referral. When intervention services are recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program).

Documentation addresses the type and severity of the communication impairment, or risks of impaired communication development, and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1990). The roles of speech-language pathologists in service delivery to infants, toddlers, and their families. *Asha, 32*(Suppl. 2), 4.

American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists providing services to infants and families in the NICU environment. *ASHA Supplement, 24*, 159–165.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Guidelines. Available from https://www.asha.org/policy/.

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American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Technical report. *ASHA Supplement, 24*, 121–130.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#12. COMMUNICATION INTERVENTION–INFANTS AND TODDLERS

Family-centered intervention and developmentally supportive services are provided for infants and toddlers with identified communication disorders or with high risks for delayed development of receptive and expressive language skills.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Communication interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization framework, intervention is designed to –

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect communication;
- facilitate the infant's or toddler's activities and participation by working with the family to assist the infant or toddler to acquire new communication skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services. Early intervention strategies may function as prevention for communication problems (e.g., delayed language because of preterm status).

CLINICAL INDICATIONS

Communication intervention for infants and toddlers is prompted by referral and/ or by the results of an early communication, and prespeech-language assessment. Infants and toddlers and their families

receive intervention and/or consultation services when their ability to communicate effectively is impaired, or likely to be impaired, because of identified biological or other developmental risks, and when there is a reasonable expectation of benefit to the infant/toddler in body structure/ function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention for infants/toddlers is family-centered and involves providing timely, developmental supportive and culturally appropriate information and guidance to families/caregivers, and other significant persons about the normal development of speech-language-communication and how to foster it, the risks for communication disorder, course of intervention, an estimate of intervention duration, and prognosis for improvement and/or prevention of a communication disorder.

Depending on assessment results and the age of the infant/toddler, intervention addresses the following:

- Preverbal communication (e.g., helping the family/caregiver be sensitive to the infant's or toddler's physical states and needs, gestural and other means of conveying them, and helping them learn to foster the development of preverbal expressions of communicative intentions and turn-taking).
- Feeding and swallowing skills.
- Early receptive language skills (e.g., understanding words, sentences, and communicative intentions with and without nonverbal supports).
- Early expressive language skills (e.g., babbling, producing early words and sentences; expressing a variety of communicative functions verbally and nonverbally).
- Social interaction, play, and emergent literacy skills (e.g., engaging in joint action routines; interacting with family/caregivers using toys, baby books and other age-appropriate literacy materials).

Intervention extends long enough to accomplish stated objectives/predicted outcomes. The intervention period ends when there is no longer any expectation for further benefit at this particular developmental stage.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including Neonatal Intensive Care Units (NICUs), homes, day care, clinical and community settings that are selected on the basis of intervention goals and in consideration of natural contexts and preferences of the infant's/toddler's family/caregivers.

In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the infant/toddler's communication interaction and development. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the infant/toddler and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1990). The roles of speech-language pathologists in service delivery to infants, toddlers, and their families. *Asha, 32*(Suppl. 2), 4.

American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists providing services to infants and families in the NICU environment. *ASHA Supplement, 24*, 159–165.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Guidelines. Available from https://www.asha.org/policy/.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Position statement. *ASHA Supplement, 24*, 60–61.

American Speech-Language-Hearing Association. (2004). Roles of speech-language pathologists in the neonatal intensive care unit: Technical report. *ASHA Supplement, 24*, 121–130.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#13. PRESCHOOL SPEECH-LANGUAGE AND COMMUNICATION ASSESSMENT

Preschool speech-language-communication assessment is provided to evaluate strengths and weaknesses of speech, language, communication, social interaction, and emergent literacy functioning in preschool-age children including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Preschool communication assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Speech, language, communication, social interaction, and emergent literacy assessments are conducted by appropriately credentialed and trained speech- language pathologists.

Speech-language pathologists may perform these assessments as members of collaborative teams that may include family/caregivers, day care providers, preschool teachers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe—

- underlying strengths and deficits related to factors that affect communication performance, such as communicative intent, social interaction skills, play, speech, language, and emergent literacy behaviors;
- effects of preschool communication impairments on the individual's activities (capacity and performance in everyday communication contexts) and participation, such as day care, preschool, and caregiver interaction;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with speech-language impairment.

Assessment may result in the following:

- Diagnosis of a communication disorder, clinical description of the characteristics of the preschooler's communication development and disorder.
- Identification of a communication difference, possibly co-occurring with a communication disorder.
- Prognosis for change (in the preschooler or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Speech, language, communication, social interaction, and emergent literacy assessments are provided to preschoolers as needed, requested, or mandated, or when other evidence suggests that they have risks for spoken and written language impairments involving their body structure/function and/or activities/ participation.

Assessment is prompted by referral (e.g., through Child Find), by the preschooler's medical, developmental, or educational status, or by failing a speech-language screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Collection of relevant case history information and parental/teacher perspectives on the child's development and needs and behavioral observations by family/teachers and clinician.
- Standardized and/or nonstandardized methods selected with consideration for ecological validity, such as—
    - instruments that examine age-appropriate syntax, semantics, and pragmatics;
    - criterion referenced instruments; °developmental scales (including play scales);

  - instruments that examine emergent literacy, including early drawing and writing, phonological processes, print awareness, and book interactions;
  - language samples in multiple contexts.
- Follow-up services to monitor development and ensure appropriate intervention and support for preschoolers with speech-language and communication disorders and differences.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting and/or other natural environment conducive to eliciting representative samples of the preschooler's speech-language and communication abilities. Selection of settings for assessment is based on the goals of assessment with sensitivity to the child's speech community, and in consideration of the WHO framework. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings and interactions.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the preschooler and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When intervention services are recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program) required.

Documentation addresses the type and severity of the communication disorder or difference and associated conditions (e.g., medical or special education diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines such as Individuals with Disabilities Education Act (IDEA) Parts B and C.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1991). Guidelines for speech-language pathologists serving persons with language, sociocommunication, and/or cognitive- communication impairments. *Asha, 33*(Suppl. 5), 21–28.

American Speech-Language-Hearing Association. (2001). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (position statement, executive summary of guidelines, technical report). *ASHA Supplement 21*, 17–28.

American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists with respect to reading and writing in children and adolescents. *ASHA 2002 Desk Reference, 3*, 455–464.

American Speech-Language-Hearing Association. (2004). Admission/discharge criteria in speech-language pathology. *ASHA Supplement 24*, 65–70.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#14. PRESCHOOL SPEECH-LANGUAGE AND COMMUNICATION INTERVENTION

Speech-language and communication intervention services are provided for preschoolers with impaired or delayed speech, language, and/or communication skills and related risks for literacy learning difficulties.

Preschool speech-language-communication interventions are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Preschool speech-language and communication interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g. educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect speech-language and communication development and use among preschoolers, and for the particular preschooler;
- facilitate the preschooler's activities and participation by assisting the child to acquire new communication skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators and reduction of risks for literacy learning difficulties. Intervention also may result in recommendations for speech-language and communication reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Speech-language-communication interventions are prompted by referral, mandate, and/or by the results of a speech-language assessment. Children receive intervention and/or consultation services when their ability to communicate effectively is impaired because of a communication disorder and when there is a reasonable expectation of benefit in body structure/function and/or activity/ participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and other significant persons about normal speech-language and communication development, emergent literacy, the communication disorder, course and type of intervention, an estimate of intervention duration, and prognosis for improvement and reduction of future risks.

Depending on assessment results, intervention addresses the following:

- Receptive language skills (e.g., attention and listening skills; vocabulary development; following directions; understanding sentences and stories; responding to communicative intent of peers and adult partners).
- Expressive language skills (e.g., using age-appropriate phonology and articulation skills; using a variety of words; formulating simple and complex sentences; expressing a variety of communicative functions; engaging with peers).
- Play, social interaction, and emergent literacy skills (e.g., using toys, props, and literacy materials in dramatic play; interacting appropriately with peers and adult partners; interacting with books and demonstrating emergent writing skills).
- Oral narrative skills (from sequences to simple stories).
- Alternative and augmentative communication (AAC) and/or other assistive technology supports as appropriate.

Intervention extends long enough to accomplish stated objectives/predicted outcomes. The intervention period does not continue when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including homes, day care centers, clinics, and preschools that are selected on the basis of intervention goals and in consideration of natural contexts for the preschool-age child. In any setting, intervention is family-centered, developmentally supportive, culturally appropriate and addresses the personal and environmental factors that are barriers to or facilitators of the preschooler's communication. There is a plan to generalize and maintain intervention gains and to increase participation in relevant activities and settings.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the preschooler and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1991). Guidelines for speech-language- pathologists serving persons with language, sociocommunication, and/or cognitive- communication impairments. *Asha, 33*(Suppl. 5), 21–28.

American Speech-Language-Hearing Association. (1996). Inclusive practices for children and youths with communication disorders. *Asha, 38*(Suppl. 16), 35–44.

American Speech-Language-Hearing Association. (2001). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (position statement, executive summary of guidelines, technical report). *ASHA Supplement 21*, 17–28.

American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists with respect to reading and writing in children and adolescents. *ASHA 2002 Desk Reference, 3*, 455–464.

American Speech-Language-Hearing Association. (2004). Admission/discharge criteria in speech-language pathology. *ASHA Supplement 24*, 65–70.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#15. SPEECH SOUND ASSESSMENT

Assessment of articulation and phonology is provided to evaluate articulatory and phonological functioning (strengths and weaknesses in speech sound discrimination and production), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Articulation and phonology assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Speech sound assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying structural/functional strengths and deficits related to articulatory and phonological factors that affect communication performance;
- effects of articulation and phonology impairments on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with speech sound disorders.

Assessment may result in the following:

- Diagnosis of a speech sound disorder, including childhood apraxia of speech.
- Clinical description of the characteristics of articulation and phonology (e.g., speech sound discrimination, developmental phonological processes, production of phonemes in multiple contexts, intelligibility, phonemic awareness).
- Identification of a communication difference, possibly co-occurring with a speech sound disorder.
- Prognosis for change (in the individual or relevant environmental contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Speech sound assessments are provided to individuals as needed, requested, or mandated or when other evidence suggests that individuals have articulation and phonology impairments associated with their body structure/function and/or communication activities/participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech-language screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history, including medical status, education, vocation and socioeconomic, cultural, and linguistic backgrounds.
- Review of auditory, visual, motor, and cognitive status.
- Standardized and/or nonstandardized assessments including –
- articulation tests;
- spontaneous speech samples;
- error analysis to determine whether the individual displays primarily speech production deficits and/or deficits associated with phonological constraints;
- independent analysis such as a phonetic inventory;
- relational analysis such as assessment of simplification processes;
- observation of intelligibility in communication environments.
- Standardized measures for articulation and/or phonological assessment selected with consideration for documented ecological validity.
- Follow-up services to monitor status and ensure appropriate intervention and support for individuals with identified speech sound disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting or other natural environments conducive to eliciting a representative sample of the patient's/client's speech production. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When intervention is recommended, information is provided concerning frequency, estimated duration, and type of service delivery.

Documentation addresses the type and severity of the speech sound disorder or difference and associated conditions (e.g., educational or medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1983). Social dialects and implications of the position on social dialects. *Asha, 25*, 23–27.

American Speech-Language-Hearing Association. (1989, March). Bilingual speech- language pathologists and audiologists: Definition. *Asha, 31*, 93.

American Speech-Language-Hearing Association. (1998). Provision of instruction in English as a second language by speech-language pathologists in school settings. *Asha, 40*(Suppl. 18).

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American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists and audiologists to provide culturally and linguistically appropriate services. *ASHA Supplement 24*, 152–158.

American Speech-Language-Hearing Association Joint Subcommittee of the Executive Board on English Language Proficiency. (1998). Students and professionals who speak English with accents and nonstandard dialects: Issues and recommendations. Position statement. *Asha, 40*(Suppl. 18), 28–31.

American Speech-Language-Hearing Association Joint Subcommittee of the Executive Board on English Language Proficiency. (1998). Students and professionals who speak English with accents and nonstandard dialects: Issues and recommendations. Technical report. *Asha, 40*(Suppl. 18), 28–31.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#16. SPEECH SOUND INTERVENTION

Intervention in speech sound disorders addresses articulatory and phonological impairments, associated activity and participation limitations, and context barriers and facilitators by optimizing speech discrimination, speech sound production, and intelligibility in multiple communication contexts.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Interventions in speech sound disorders are conducted by appropriately credentialed and rained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect articulation and phonology;
- facilitate the individual's activities and participation by assisting the person to acquire new speech production skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and contextual factors. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Intervention for speech sound disorders is prompted by referral, mandates, and/or by the results of an assessment that includes measures of articulation and phonology. Individuals receive treatment and/or consultation services when their ability to communicate effectively is impaired because of a speech sound disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and other significant persons about articulation and phonology, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Depending on assessment results and age of the client/patient, intervention addresses the following:

- Selection of intervention targets based on the results of an assessment of the client/patient's articulation and phonology.
- Improvement of speech sound discrimination and production.
- General facilitation of newly acquired articulation and/or phonological abilities to a variety of speaking, listening, and literacy-learning contexts.
- Increased phonological awareness of sounds and sound sequences in words and relating them to print orthography (when age-appropriate).

Intervention extends long enough to accomplish stated objectives/predicted outcomes. The intervention period ends when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, selected on the basis of intervention goals and in consideration of the social, educational, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's articulatory and phonological abilities. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1983). Social dialects and implications of the position on social dialects. *Asha, 25*, 23–27.

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#17. SPOKEN AND WRITTEN LANGUAGE ASSESSMENT—SCHOOL-AGE CHILDREN AND ADOLESCENTS

Spoken and written language assessment for school-age children and adolescents is used to evaluate spoken and written language functioning (strengths and weaknesses) in school-age children and adolescents, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Spoken and written language assessment among school-age children and adolescents is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Spoken and written language assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments as members of collaborative teams that include the individual, family/caregivers, educators, and other relevant persons.

EXPECTED OUTCOMES

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe—

- underlying structural/functional strengths and deficits in language and literacy knowledge and skills that affect communication performance;
- effects of spoken and written communication impairments on the individual's activities (capacity and performance in everyday curricular/communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation.

Assessment may result in the following:

- Diagnosis of a language disorder involving spoken and written language, or indication that an individual does not have a disorder.
- Clinical description of the spoken and written language disorder.
- Identification of a communication difference, possibly co-occurring with a language disorder.
- Evaluation of the effectiveness of prior intervention and supports.
- Prognosis for change (if a disorder is diagnosed).
- Recommendations for intervention and contextual modifications or other follow-up activities.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Spoken and written language assessment services are provided to school-age children and adolescents as needed, requested, or mandated or when other evidence suggests that individuals may have spoken and written language impairments associated with their body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's educational or medical status, or by failing a speech and language screening that is sensitive to cultural and linguistic diversity backgrounds.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Collection of relevant case history information, including medical and educational status, and teacher, parent, and client/patient perspectives on the problem.
- Administration of standardized assessment tools and/or nonstandardized sampling or observation methods.
- Knowledge and use of language for listening, speaking, reading, writing, and thinking, including —

  - phonology and print symbols (orthography) for recognizing and producing intelligible spoken and written words;
  - syntactic structures and semantic relationships for understanding and formulating complex spoken and written sentences;
  - discourse structures for comprehending and organizing spoken and written texts;
  - pragmatic conventions (verbal and nonverbal) for communicating appropriately in varied situations;
  - metacognitive and self-regulatory strategies for handling complex language, literacy, and academic demands.
- Examination of how language strengths and weaknesses affect the individual's activities and participation in specific educational, social, and vocational activities identified as problematic by the assessment team.
- Examination of contextual factors that influence the individual's relative success or difficulty in educational, social, and vocational activities.
- Selection of standardized measures for spoken and written language assessment with consideration for documented ecological validity (including relevance to the student's sociocultural experiences, educational curriculum, and/or vocational needs).
- Follow-up services to monitor cognitive-communication status and ensure appropriate intervention and support for children and adolescents with identified spoken and written language disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in clinical and/or educational environments conducive to eliciting representative samples of the patient's/client's spoken and written language functioning. Selection of settings for assessment is based on the input of others (including the child or adolescent), goals of assessment, and in consideration of the WHO framework. Identifying the influence of contextual factors on functioning (activity and participation) requires the collection of assessment data from multiple language contexts and settings.

Equipment Specifications: Children and adolescents who use AAC devices and techniques are assessed with the devices; those with hearing impairment are assessed using their preferred mode of communication and with optimal amplification.

All equipment and measurement tools are used in accordance with the manufacturer's specifications.

Assessment tools are selected with regard to—

- evidence of adequate reliability and validity, including ecological validity (e.g., curriculum-based assessment may conducted with components of a student's actual school curriculum and with reference to educational agency standards);
- appropriateness for the cultural and linguistic backgrounds of the individual.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation of assessments and observations, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning recommended frequency, estimated duration, and type of service (e.g., individual, group, classroom-based, home program).

Documentation addresses the type and severity of the child or adolescent's spoken and written language disorder or difference and associated conditions (e.g., medical diagnoses or special education category).

Documentation may include a portfolio of the child or adolescent's communication samples (e.g., audiotaped or videotaped interactions, transcripts of spoken conversations or print samples read aloud, descriptions of nonverbal interactions or writing processes, written products).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1982). Definitions of language. *Asha, 24*(6), 44.

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American Speech-Language-Hearing Association. (1996). Inclusive practices for children and youths with communication disorders. *Asha, 38*(Suppl. 16), 35–44.

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American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists with respect to reading and writing in children and adolescents. *ASHA 2002 Desk Reference, 3*, 455–464.

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#18. SPOKEN AND WRITTEN LANGUAGE INTERVENTION–SCHOOL-AGE CHILDREN AND ADOLESCENTS

Intervention services (including academic instruction) are provided for school-age children and adolescents with spoken and written language.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Spoken and written language interventions for school-age children and adolescents are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that include general and special education teachers, the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect spoken and written language development and use;
- facilitate the individual's social, educational, and vocational activities and participation by assisting the person to acquire new spoken and written language skills and communication strategies (verbal and nonverbal);
- modify contextual factors to reduce barriers and enhance facilitators of successful spoken and written communication and participation and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved spoken and written language abilities; improved social, academic, and/or vocational functioning and participation; and improved contextual facilitators. Intervention also may result in recommendations for spoken and written language reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Spoken and written language interventions for children and adolescents are prompted by referral, mandate sand/or by the results of a spoken and written language assessment. Children and adolescents receive intervention services (including consultation) when their ability to communicate effectively and to participate in social, educational, or vocational activities is impaired because of a spoken and written disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation.

Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

Speech-language pathologists also may provide services aimed at enhancing spoken and written language abilities and participation in social, education, and vocational activities, if so requested, when a communication difference is present or when spoken/written language development risks have been identified and service delivery is requested.

CLINICAL PROCESS

Intervention includes collaborative problem solving and providing information and guidance to patients/clients, families/caregivers, teachers, and other significant persons about spoken and written

language development and disorders, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Intervention goals and objectives are determined from assessment (including input from parents, teachers, the child or adolescent, and other relevant persons); are relevant to the educational curriculum, vocational and social-interaction priorities; and are reviewed periodically to determine continued appropriateness.

Depending on assessment results and the age/stage of the child or adolescent, intervention addresses the following:

- Knowledge and use of language for listening, speaking, reading, writing, and thinking, including –
    - phonology and print symbols (orthography) for recognizing and producing intelligible spoken and written words;
    - syntactic structures and semantic relationships for understanding and formulating complex spoken and written sentences;
    - discourse structures for comprehending and organizing spoken and written texts;
    - pragmatic conventions (verbal and nonverbal) for communicating appropriately in varied situations;
    - metacognitive and self-regulatory strategies for handling complex language, literacy, and academic demands.
- Spoken and written language for social, educational, and vocational functions, with an emphasis on participation in specific activities identified as problematic for the individual.
- Contextual factors that influence the individual's relative success or difficulty in those activities.

Progress is measured by comparing changes in speech-language skills to established performance baselines, including curriculum-based language assessments and classroom or workplace observations.

Intervention extends long enough to accomplish stated objectives/predicted outcomes and ends when there is no expectation for further benefit during the current developmental stage.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including regular or special education classes or in individual/group treatment outside the classroom/ workplace setting, selected on the basis of intervention goals and in consideration of the social, academic and/or vocational activities that are relevant to or desired by the individual.

In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's spoken and written language production. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Speech-language pathologists serve as members of education teams including special education prereferral teams and problem solving teams (e.g., teacher assistance teams). In addition, speech-language pathologists serve as members of an education team when they are providing speech-language instruction in the context of the academic program.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications. Assistive technology needs (e.g., classroom or personal amplification systems, modified computer access software or hardware, augmentative and alternative communication (AAC) systems) are provided as needed and documented in the intervention plan.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions (including consultations) that were provided.
- Consideration of the need for assistive technology (e.g., classroom or personal amplification systems, modified computer access software or hardware, AAC systems) and a plan for monitoring, maintaining, and updating any technological supports.
- Progress toward stated goals (relative to baseline levels and with relevance to the general education curriculum or vocational activities), updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Federal Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Documentation may be a part of the patient's/client's individualized education program or other collaborative treatment plan.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1982). Definitions of language. *Asha, 24*, 44.

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#19. SPEECH-LANGUAGE ASSESSMENT FOR INDIVIDUALS WHO ARE BILINGUAL AND/OR LEARNING ENGLISH AS AN ADDITIONAL LANGUAGE

Speech-language assessment for individuals who are bilingual and/or learning English as an additional language (i.e., "English Language Learners, ELL") comprises services to assess speech-language and communication functioning (strengths and weaknesses) in an individual's first language (L1) or a second language (L2). Bilingual assessment services include identification of language use (i.e., the language the individual speaks or is exposed to most of the time) and language proficiency (i.e., degree of ability in each language). In addition, assessment addresses potential impairments, associated activity and participation limitations, and context barriers and facilitators.

Speech-language assessments for individuals who are bilingual and/or learning English as an additional language are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Speech-language assessments for individuals who are bilingual and/or learning English as an additional language are conducted by appropriately credentialed and trained speech-language pathologists, supported as necessary by trained interpreters.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOMES

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying structural/functional strengths and deficits in language (and literacy) knowledge and skills within the individual's primary language that affect communication performance with others who speak the same language;
- effects of speech-language and communication impairments on the individual's activities (capacity and performance in everyday curricular/ communication contexts) and participation within the individual's community;
- contextual factors that serve as barriers to or facilitators of successful communication and participation.

Assessment may result in the following:

- Identification of the individual's relative language proficiency, (e.g., comparable proficiency in L1 and L2; proficiency in L1 but not L2; or limited proficiency in both languages).
- Diagnosis of a language disorder.
- Clinical description of the individual's speech-language and communication abilities (strengths and needs) in the individual's first language and in English.
- Identification of a communication difference, possibly co-occurring with a language disorder.
- Evaluation of the effectiveness of prior intervention and supports.
- Prognosis for change (if a disorder is diagnosed).
- An estimate of language learning capacity and/or a plan to conduct ongoing/ dynamic assessment to determine language learning capacity in L1 and/or L2.
- Recommendations for intervention and contextual modifications or other follow-up activities.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Speech-language assessments for bilingual speakers and individuals who are bilingual and/or learning English as an additional language are conducted as needed, requested, or mandated or when other evidence suggests that individuals may have speech-language/communication impairments associated with their body structure/function and/or activities/participation as defined by the World Health Organization (see *Fundamental Components and Guiding Principles*).

Assessment is prompted by referral, by the individual's medical or educational status, or by failing a speech and language screening conducted with sensitivity to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses components within the World Health Organization (WHO) framework, including body structures/functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Collection of relevant case history information (using a trained interpreter if necessary), including a profile of current and past exposure to specific languages, as well as parent/caregiver reports,

teacher reports, reports by others familiar with the individual's speech community, and the individual's perspectives, as appropriate.

- Selection, administration, and interpretation of standardized assessment tools and/or nonstandardized sampling (e.g., interviews and observation in varied settings and multiple activities) conducted with recognition of the unique characteristics of the individual's linguistic community.
- Use of trained interpreter as appropriate.
- Examination of ability to use speech-language and communication skills, including phonological and grammatical development (compared to the norms of the individual's speech community), ability to comprehend and integrate verbal information, ability to use both verbal and nonverbal communication skills to interact with people from multiple speech communities.
- Examination of how language strengths and weaknesses (in both L1 and L2) affect the individual's activities and participation in specific educational, social, and vocational activities identified as problematic by the assessment team.
- Examination of contextual factors that influence the individual's relative success or difficulty in educational, social, and vocational activities.
- Selection of assessment procedures occurs with consideration for documented ecological validity (including relevance to the individual's language proficiency, sociocultural experiences, educational curriculum, and/or vocational needs).
- Follow-up services to monitor language learning capacity and cognitive- communication status and to ensure appropriate intervention and support for individuals who are bilingual or learning English as an additional language and who also have speech-language disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in varied clinical or educational settings and/or other natural environments representing the individual's native/home speech community and conducive to eliciting a representative sample of the patient's/ client's language functioning in L1 and L2. Selection of settings for assessment is based on the input of others (including the individual), goals of assessment, and in consideration of the WHO framework. Identifying the influence of contextual factors on functioning (activity and participation) requires the collection of assessment data from multiple language contexts and settings.

Equipment Specifications: Individuals who use AAC devices and techniques are assessed with their devices programmed in the appropriate language; those who are hearing impaired are assessed using their preferred mode of communication and with optimal amplification.

Equipment is used in accordance with the manufacturer's specifications.

Assessment tools are selected with regard to—

- evidence of adequate reliability and validity, including ecological validity (e.g., curriculum-based assessment may conducted with components of a student's actual school curriculum and with reference to educational agency standards);
- appropriateness for persons from the cultural and linguistic community of the individual.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation of assessments and observations, prognosis, and recommendations.

Documentation includes a description and results of the procedures used to identify the individual's relative proficiency in each language.

Recommendations may include the need for further assessment, follow-up, or referral.

When intervention is recommended, information is provided concerning recommended frequency, estimated duration, and type of service (e.g., individual, group, classroom-based, home program).

Documentation addresses the type and severity of the individual's speech-language and communication disorder or difference and associated conditions (e.g., medical diagnoses or special education category).

Documentation may include a portfolio of the individual's communication samples in both languages (e.g., audiotaped or videotaped interactions, transcripts of spoken conversations or print samples read aloud, descriptions of nonverbal interactions or writing processes, written language samples).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers in a language and modality they can understand. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1983). Social dialects and implications of the position on social dialects. *Asha, 25*, 23–27.

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#20. SPOKEN AND WRITTEN LANGUAGE ASSESSMENT–ADULTS

These services assess spoken and written language functioning (strengths and weaknesses) in adults, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Spoken and written language assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments as a member of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying strengths and deficits related to spoken and written language factors that affect communication performance;
- effects of the language disorder on the individual's activities and participation in ideal settings and everyday contexts;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with spoken and written language disorders.

Assessment may result in the following:

- Diagnosis of a language disorder.
- Description of the characteristics of the language disorder.

- Identification of a communication difference, possibly co-occurring with a language disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Spoken and written language assessment services are provided to adults as needed, requested, or mandated or when other evidence suggests that they have spoken or written language impairments involving body structure/function and affecting activities/participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech, language, or cognitive-communication screening conducted with sensitivity to influences of cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO framework, including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains); and/or dynamic (i.e., using hypothesis- testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history, including medical status, education, vocation, and socio-economic, cultural, and linguistic backgrounds.
- Review of auditory, visual, motor, cognitive, and emotional status.
- Standardized and nonstandardized methods, selected with consideration of ecological validity:
    - Patient's/client's report of areas of concern (listening, speaking, reading, writing), contexts of concern (e.g., social interactions, work activities), and goals and preferences;
    - Administration of standardized assessment tools and/or nonstandardized sampling or observational methods to assess and describe the individual's knowledge and skills in the areas of language form (phonology and alphabetic symbols, morphology and orthographic patterns, and syntax), content (semantics), and use (pragmatics) across spoken and written modalities;

  - Analysis of natural communication samples gathered in modalities (listening, speaking, reading, or writing) and specific contexts (social. educational, vocational) identified as problematic;
  - Assessment of oral, motor, and speech function;
  - Identification of contextual barriers and facilitators and potential for effective compensatory techniques and strategies including the use of alternate/augmentative communication (AAC).
- Follow-up services to monitor spoken and written language status and ensure appropriate intervention and support in individuals with identified language disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessments are conducted in a clinical and/or natural environment conducive to eliciting a representative sample of the patient's/client's spoken and written language functioning. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment is used and monitored in accordance with the manufacturer's specifications. Selection of standardized measures for language assessment occurs in consideration for ecological validity.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before re-use are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When intervention is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program) required.

Documentation addresses the type and severity of the spoken and written language disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation may include a portfolio of the adult's communication samples (e.g., audiotaped or videotaped samples of interactions, transcripts of spoken conversations or orally read material, descriptions of nonverbal interactions, rough drafts, written language samples).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#21. SPOKEN AND WRITTEN LANGUAGE INTERVENTION–ADULTS

Intervention services are conducted for adults with spoken and/or written language disorders, including problems in areas of language form (phonology and alphabetic symbols, morphology and orthographic patterns, and syntax), content (semantics), and/or use (pragmatics) across spoken and written modalities.

Intervention is conducted consistent with the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Spoken and written language interventions for adults are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to–

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect communication;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies;
- modify contextual factors that serve as barriers and enhance facilitators of successful communication and participation and provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in reduced deficits and contextual barriers, improved spoken and written language abilities and contextual facilitators, and measurably enhanced functioning and participation. Intervention also may result in recommendations for language reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Intervention for a spoken and/or written language disorder is prompted by referral or by the results of a speech-language assessment. Adults receive intervention and/ or consultation services when their ability to communicate effectively and participate in social, educational, or vocational activities is impaired because of a language disorder and when there is a reasonable expectation of benefit to the individual

in body structure/function and/or activity/participation. Interventions that enhance activity and participation through implementation of strategies or modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families/caregivers, and other significant persons about the nature of spoken and/ or written language disorders, the course of treatment, and prognosis for recovery.

Intervention addresses the complexities of a spoken and/or written language disorder in a manner that is sensitive to cultural and linguistic diversity.

Depending on assessment results, intervention addresses the following:

- Knowledge and use of language for listening, speaking, reading, writing, and thinking, including –
    - phonology and print symbols (orthography) for recognizing and producing intelligible spoken and written words;
    - syntactic structures and semantic relationships for understanding and formulating complex spoken and written sentences;
    - discourse structures for comprehending and organizing spoken and written texts;
    - pragmatic rules for communicating appropriately in varied situations;
    - metacognitive and self-regulatory strategies for handling complex language and literacy demands.
- Spoken and written language for social, educational, and vocational activities, with an emphasis on participation in specific activities identified as problematic for the individual.
- Contextual factors that influence the individual's relative success or difficulty in those activities.
- Compensatory communication techniques and strategies including the use of augmentative and alternative communication or other assistive technology.
- Training of others in the individual's environment to use communication strategies, cuing techniques, and/or assistive technology to support increased comprehension of spoken and written language and to facilitate increased spoken and written output.
- Development of plans, including referral, for problems co-occurring with spoken and written language disorders, such as hearing or visual difficulties, speech or voice disorders, and emotional disturbance.

Intervention extends long enough to accomplish stated objectives/predicted outcomes and ends when there is no longer any expectation for further benefit. Clinicians provide an estimate of treatment duration to patients/clients and their families/caregivers.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in clinical and natural environments that are selected on the basis of intervention goals and in consideration of the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's spoken and written language function. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: Equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#22. COGNITIVE-COMMUNICATION ASSESSMENT

Cognitive-communication assessment for children and adults addresses cognitive- communication functioning (strengths and weaknesses), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Cognitive-communication assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments as a member of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe —

- underlying strengths and weaknesses related to cognitive, executive function/ self-regulatory, and linguistic factors, including social skills that affect communication performance;

- effects of cognitive-communication impairments on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with cognitive- communication impairment.

Assessments may result in the following:

- Diagnosis of a cognitive-communication disorder.
- Clinical description of the characteristics of a cognitive-communication disorder.
- Identification of a communication difference, possibly co-occurring with a cognitive-communication disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Cognitive-communication assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that they have cognitive-communication impairments affecting body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's educational or medical status, or by failing a language or cognitive-communication screening that is sensitive to cultural and linguistical diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and address the components within the WHO framework, including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) and/or dynamic (i.e., using hypothesis- testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history, including medical status, education, vocation, and socio-economic, cultural, and linguistic background.
- Review of auditory, visual, motor, cognitive, and emotional status.
- Patient/client reports of goals and preferences, as well as domains and contexts of concern.

- Standardized and/or nonstandardized methods selected with consideration for ecological validity:
    - Observe and describe the individual's processing of varied types of information under ideal conditions (i.e., capacity) and in the context of varied activities and settings (i.e., performance) (e.g., ability to attend to, perceive, organize, and remember verbal and nonverbal information, to reason and to solve problems);
    - Observe and describe the individual's executive or self-regulatory control over cognitive, language, and social skills functioning (e.g., set goals, plan, initiate and inhibit, self-monitor and self-evaluate, solve problems, think and act strategically);
    - Analyze the cognitive and communication demands of relevant social, academic, and/or vocational tasks and to identify possible facilitative effects in modification of those tasks;
    - Identify the communication and support competencies of relevant everyday people in the environment and possible facilitative effects of modification of their support behaviors;
    - Identify the individual's potential for effective compensatory behaviors and associated motivational barriers and facilitators.
- Follow-up services to monitor cognitive-communication status and ensure appropriate intervention and support for individuals with identified cognitive-communication disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting, and/or other natural environments conducive to eliciting a representative sample of the patient's/ client's cognitive-communication functioning. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment is used and monitored in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before re-use are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or

referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program).

Documentation addresses the type and severity of the cognitive-communication disorder and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1987, June). Role of speech-language pathologists in the habilitation and rehabilitation of cognitively impaired individuals. *Asha, 29*, 53–55.

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#23. COGNITIVE-COMMUNICATION INTERVENTION

Intervention services are provided to individuals with cognitive-communication disorders, including problems in the ability to attend to, perceive, organize, and remember information; to reason and to solve problems; and to exert executive or self-regulatory control over cognitive, language, and social skills functioning.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Interventions for cognitive-communication disorders are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect communication;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies;

- modify contextual factors that serve as barriers and enhance facilitators of successful communication and participation including development and use of appropriate accommodations.

Intervention is expected to result in reduced deficits and contextual barriers, improved abilities and contextual facilitators, and measurably enhanced functioning and participation. Intervention also may result in recommendations for cognitive-communication reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Treatment for cognitive-communication disorders is prompted by the results of a cognitive-communication assessment. Individuals of all ages receive intervention and/or consultation services when their ability to communicate effectively is impaired because of a cognitive-communication disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention services include providing information and guidance to patients/ clients, families/caregivers, and other significant persons about the cognitive- communication disorder, and the course of treatment and prognosis for recovery.

Intervention addresses the complexities of a cognitive-communication disorder, including possible reactions, defensive behaviors, and coping strategies of the person who has the cognitive-communication disorder and the reactions of significant others in the environment in a manner that is sensitive to cultural and linguistic diversity.

Depending on assessment results, intervention addresses the following:

- Processing of varied types of information under ideal conditions (i.e., capacity) and in the context of varied activities and settings (i.e., performance) (e.g., ability to attend to, perceive, organize, and remember verbal and nonverbal information, including social cues, to reason, and to solve problems).
- Executive or self-regulatory control over cognitive, language, and social skills functioning (e.g., set goals, plan, initiate and inhibit, self-monitor and self- evaluate, solve problems, think and act strategically).

- Modification of the cognitive and communication demands of relevant social, academic, and/or vocational tasks to facilitate performance of those tasks.
- Modification of the communication and support competencies of relevant everyday people in the environment.
- Development and use of effective compensatory behaviors and communication techniques and strategies.
- Development of plans, including referral, for problems other than in cognitive- communication that may accompany the disorder, such as hearing or visual difficulties, language or speech disorders, and emotional disturbance.

Intervention is long enough to accomplish stated objectives/predicted outcomes. The intervention ends when there is no longer any expectation for further benefit. Clinicians provide an estimate of treatment duration to patients/clients and their families/caregivers.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in clinical or educational settings and/or natural environments and are selected on the basis of intervention goals and in considerations of the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's cognitive-communication function. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.

- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures and functions, activities and participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights to Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#24. SEVERE COMMUNICATION IMPAIRMENT ASSESSMENT

Severe communication impairment assessments are provided to evaluate communication functioning (strengths and weaknesses, including challenging or self-injurious behaviors) in individuals of all ages, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Severe communication impairment assessments are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Assessments for severe communication impairment are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists generally perform these assessments as members of collaborative teams that include the individual, family/caregivers, special educators, behavioral specialists, and other relevant persons.

EXPECTED OUTCOMES

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe —

- underlying structural/functional strengths and deficits in cognitive and executive function/self-regulatory factors and interpersonal knowledge and skills that affect communication performance, and to analyze patterns of unconventional or maladaptive behavior and their apparent message value;
- effects of severe communication impairments on the individual's activities (capacity and performance in everyday functional communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation.

Assessment may result in the following:

- Identification of a severe communication impairment and possible co- occurring conditions (e.g., swallowing disorder).
- Clinical description of the characteristics of a severe communication impairment including challenging or self-injurious behaviors and their communicative and/or self-regulatory functions.
- Identification of a communication difference, possibly co-occurring with a severe communication impairment.
- Evaluation of the effectiveness of prior intervention and supports.
- Prognosis for change.
- Recommendations for intervention and contextual modifications or other follow-up activities, including more socially acceptable means for communication and self-regulation.
- Recommendations for augmentative and alternative communication or other assistive technology.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Severe communication impairment assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that individuals have severe impairments (possibly including self- injurious or other maladaptive or challenging behaviors) associated with their body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's medical or behavioral status, or by failing a speech screening that is sensitive to persons from all culturally and linguistically diverse backgrounds.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures).

Assessment includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Collection of relevant case history information, including behavioral and communication status, swallowing and feeding status, developmental and educational status, and teacher and family perspectives on the problem.
- Administration of nonstandardized sampling or observation methods (e.g., antecedent-behavior-consequence (ABC) analyses) to interpret the messages apparently being conveyed by any maladaptive or self-injurious behaviors, and analyzing any other needs, social desires, or emotions the individual might be communicating through the maladaptive or challenging behaviors or other unconventional modes of communication.
- Assessment of the individual's resources for communicating and consideration of the need for augmentative and alternative communication (AAC) supports.
- Assessment of how the particular pattern of communication and other behaviors affects the individual's activities and participation in functional activities.
- Assessment of contextual factors that influence the individual's communicative interactions and behaviors.
- Selection of observation and analysis techniques occurs with consideration for ecological validity, including relevance to the individual's functional communication needs and reduction of challenging behaviors.
- Follow-up services to monitor cognitive-communication status and reduction of challenging behaviors to ensure appropriate intervention and support in individuals with severe communication impairments.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical, institutional, or educational setting, home, or other natural environment conducive to eliciting a representative sample of the individual's communicative functioning. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires the collection of assessment data from multiple communicative contexts and settings.

Equipment Specifications: Individuals who use AAC systems are assessed with those systems and other preferred modes of communication and with optimal amplification.

All equipment and measurement tools are used in accordance with the manufacturer's specifications.

Assessment tools and methods are selected with regard to –

- evidence of adequate reliability and validity, including ecological validity;
- appropriateness for persons from the cultural and linguistic community, chronological age, and developmental age of the individual.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Documentation may include recommendations for social-interaction and message value interpretations; strategies for replacing challenging behaviors with more socially acceptable communication behaviors and other self-regulation abilities; communicative supports (including recommendations for AAC assessment and intervention); the need for further assessment, follow-up, or referral. When intervention is recommended, information is provided concerning recommended frequency, estimated duration, and type of service (e.g., consultation, individual, group, classroom-based, and/or home program).

Documentation addresses the type and severity of the communication disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the family/caregivers and other professionals, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#25. SEVERE COMMUNICATION IMPAIRMENT INTERVENTION

Intervention services are provided for individuals of all ages with severe communication impairments and related unconventional communication, including challenging behavior such as self-injurious and other maladaptive behaviors.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Interventions for individuals with severe communication impairment are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists generally provide these services as members of collaborative and transitional teams that may include special education teachers, behavioral specialists, the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses (including unconventional or maladaptive communication, such as self-injurious behavior) related to underlying structures and functions that are associated with communicative use and interactions;
- facilitate the individual's functional activities and participation by assisting the person to acquire more conventional means of communication and self- regulation.
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved forms of socially appropriate communication, incorporating combinations of nonverbal, gestural, spoken, written, augmentative and alternative communication (AAC) modes; corresponding reductions in challenging behaviors; improved social, academic, and/or vocational functioning and participation; and improved contextual facilitators.

Intervention also may result in recommendations for communication reassessment or follow-up, or in a referral for other services, such as AAC assessment and intervention.

CLINICAL INDICATIONS

Intervention for severe communication impairment and replacement of challenging behaviors with socially acceptable communication is prompted by referral and/or by the results of cognitive-communication and behavioral assessment. Individuals with severe communication impairments receive intervention services (including consultation) addressing body structure/function and activity/participation when their ability to communicate effectively and to participate in functional activities is impaired because of severe and multiple impairments, possibly including challenging and self-injurious behaviors.

Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention includes collaborative problem solving, gathering information from and providing information and guidance to families/caregivers, educators, residential program staff, and other significant persons about nonverbal means of communication, the message value of current unconventional and maladaptive patterns, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Intervention goals and objectives are relevant to the person's and family's/ caregivers' needs and preferences in a manner that is sensitive to cultural and linguistic diversity. They are reviewed periodically to determine continued appropriateness.

Depending on assessment results, intervention addresses the following:

- Assist the individual to experience the positive value of human communication and interaction.
- Work with others to understand the message value of maladaptive behaviors and replacing them with more socially acceptable means of communication and self-regulation (e.g., nonverbal, gestural, AAC-supported, spoken and written language).
- Modify contextual factors that influence the individual's relative success or difficulty in key activities.
- Identify life goals of the individual and family/caregivers related to social, educational, and vocational activities and participation.

Progress in activity and participation is monitored quantitatively and qualitatively with baseline data and periodic probes that measure improvement in socially acceptable communication and self-regulation behaviors and reduction in maladaptive and self-injurious behaviors.

Intervention extends long enough to accomplish stated objectives/predicted outcomes and ends when there is no expectation for further benefit during the current developmental stage.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of clinical, residential, and community settings that are selected on the basis of intervention goals and in consideration of the functional activities that are relevant to the individual's needs and preferences.

In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's communication interaction and reduction of challenging behaviors. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Speech-language pathologists generally serve as members of intervention teams including special education and other problem solving teams when addressing challenging behaviors of individuals with severe communication impairments.

Equipment Specifications: All equipment is customized for optimal access and communication outcomes, updated regularly, and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions (including consultations) that were provided.
- Progress toward stated goals (with relevance to increases of functional and conventional communication, and reduction of challenging behaviors, relative to baseline levels), updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Federal Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Documentation may be a part of the patient's/client's individualized education program or other collaborative treatment plan.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1991). Guidelines for speech-language pathologists serving persons with language, sociocommunication, and/or cognitive- communication impairments. *Asha, 33*(Suppl. 5), 21–28.

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#26. AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (AAC) ASSESSMENT

Augmentative and alternative communication (AAC) assessment is provided to determine and recommend methods, devices, aids, techniques, symbols, and/or strategies to represent and/or augment spoken and/or written language in ways that optimize communication. These components, in any combination, are known collectively as an AAC system.

Augmentative and alternative communication assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

AAC assessments are conducted by appropriately credentialed and trained speech- language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual being assessed, family/caregivers, and other relevant persons (e.g., educational, vocational, and medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify, measure, and describe —

- structural/functional strengths and deficits related to speech and language factors that affect communication performance and justify the need for AAC devices, equipment, materials, strategies, and/or services to augment speech production or comprehension, to support and promote spoken and written language learning, or to provide an alternative mode of communication;
- effects of speech-language and communication impairments on the individual's activities and participation (capacity and performance in everyday communication contexts), and how an AAC system would support such activities and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals who need AAC systems.

Individuals of all ages, diagnostic categories, and severity who need AAC systems are assisted in selecting and obtaining components (e.g., aids, techniques, symbols, strategies) to optimize communication and activity/participation.

Assessment may result in recommendations for AAC systems, for AAC intervention, for follow-up, and for a referral for other examinations or services.

CLINICAL INDICATIONS

AAC assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that individuals have communication impairments associated with their body structure/function and/or activities/participation that might justify the need for an AAC system.

Assessment is prompted by referral, by the individual's speech-language, communication, educational, vocational, social, and/or health needs, or following completion of a speech-language assessment that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to optimize selection and use of AAC systems), and includes the following:

- Review of auditory, visual, neuromotor, speech-language, and cognitive status, including observation of posture, gross and fine motor coordination, and any existing adaptive and/or orthotic devices currently used by the patient/ client (e.g., wheelchair, neckbraces, communication devices and/or techniques, other specialized equipment).
- Relevant case history information, including medical status, education, vocation, and socioeconomic, cultural and linguistic background regarding activities in which the person needs an AAC system to support communication.
- Standardized and/or nonstandardized methods for assessing the individual's use and acceptance of a range of AAC devices, aids, symbol systems, techniques, and strategies.
- Examination of specific aspects of voice, speech, language (e.g., spoken and written language samples, reading level), cognition, and existing communication options and abilities.

- Methods for identifying associated barriers and facilitators that are addressed in an intervention plan.
- Varied parameters of the AAC assessment (e.g., tests, materials) that depend on levels of severity, whether the patient/client is a child or an adult, and whether the expressive or receptive communication disorder is congenital or acquired.
- Selection of measures for AAC assessment with consideration for ecological validity, environments in which AAC systems routinely will be used, technology and device features, and preferences of the patient/client and communication partners (e.g., family/caregivers, educators, service providers).
- Assessment of a range of potential AAC systems in multiple controlled and natural contexts.
- Follow-up services to monitor individuals with identified speech-language and communication disorders justifying the need for AAC systems.
    - Cognitive-communication and language status
    - Appropriate intervention and support
    - Optimal use of the recommended AAC system
    - Adjustments in the AAC system as necessary
- Evaluation of the individual's ability to use the AAC system effectively in a variety of contexts, with adjustments made to the system as necessary.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or natural environment (e.g., home or classroom) conducive to eliciting a representative sample of the patient's/client's language and communication abilities. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from a range of settings and AAC system components.

Equipment Specifications: Assessment may require the customization and/or fabrication of items to optimize AAC system use or provide an optimal alternative access method.

Assessment tools, methods, and a range of AAC systems are selected with regard to –

- evidence of adequate reliability and validity, including ecological validity;
- appropriateness for persons from the cultural and linguistic community, chronological age, and developmental age of the individual.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious

disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

On completion of the initial AAC assessment, the professional reviews the results of any dynamic assessment trials, describes and gives a rationale for the preferred AAC system components, describes a recommended AAC intervention program, and indicates the patient's/client's (and family/caregivers') response to the recommended system and program.

Documentation includes pertinent background information, results, interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When intervention is recommended, information is provided concerning frequency, estimated duration, and type of service.

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (2002). Augmentative and alternative communication: Knowledge and skills for service delivery. *ASHA Supplement 22*, 97– 106.

American Speech-Language-Hearing Association. (2004). Admission/discharge criteria in speech-language pathology. *ASHA Supplement 24*, 65–70.

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#27. AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (AAC) INTERVENTION

Intervention is provided to assist individuals to understand and use personalized augmentative and alternative communication (AAC) systems to optimize communication activities and participation. Services are also provided to modify or repair AAC systems when necessary. An AAC system is any combination of devices, aids, techniques, symbols, and/or strategies to represent and/or augment spoken and/or written language or to provide an alternative mode of communication.

Augmentative and alternative communication system intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

AAC intervention services are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educational, vocational, and medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, AAC system intervention is designed to:

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect use of an AAC system;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies for using the AAC system effectively (e.g., in novel situations and with unfamiliar partners);
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them in conjunction with the AAC system.

AAC intervention helps patients/clients, their communication partners, teachers, parents/spouses/caregivers to understand, use, maintain, and update personalized AAC systems and other assistive technology.

Intervention promotes language learning and function, optimizes communication abilities, and increases activity/participation. Intervention also may result in recommendations for AAC system reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Individuals of all ages, varied diagnostic categories, and severity levels receive AAC intervention services when prior assessment indicates candidacy for an AAC system.

AAC system intervention services are prompted by referral, mandates and/or by the results of an AAC assessment and are sensitive to cultural and linguistic diversity.

Individuals receive treatment and/or consultation services when their body structure/function and ability to communicate are impaired to the extent that an AAC system is needed to support communication activity and participation, and when there is a reasonable expectation of benefit. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

AAC system intervention involves gathering information from and providing information and guidance to patients/clients, families/caregivers, and other significant persons about AAC system use, the course

of intervention, an estimate of intervention duration, and prognosis for improvement. Intervention extends long enough to accomplish stated objectives/predicted outcomes.

AAC system intervention considers the abilities, needs, and preferences of the patient/client and of individuals with whom the patient/client will communicate (e.g., family, caregivers, educators, service providers). It also considers the environment in which the AAC system routinely will be used.

Depending on assessment results and the age/stage and life circumstances of the client/patient, intervention addresses the following:

- Identify and educate the patient/client, family/caregivers, and relevant others in the AAC system's operation.
- Plan for optimum patient/client use, including education in maintaining the AAC system and programming updates and modifications for conversational, academic, and other uses.
- Use the AAC system while targeting any other speech-language (spoken or written) and communication goals and objectives appropriate to activity/ participation needs and the individual's age and abilities (e.g., vocabulary, sentence comprehension and production, reading and writing, conversational turn-taking and judging listener needs, natural speech and voicing).
- Use the AAC system for multiple functions in multiple contexts (e.g., educational, vocational, social).

AAC intervention includes a full continuum of service delivery models, such as individual or group intervention, family/caregiver education, and/or consultation with professional and/or paraprofessional team members.

Recommendations for use of the AAC system may address the need for further screening, assessments, treatment, follow-up, or referral.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings (e.g., structured, therapeutic, and natural) that are selected on the basis of intervention goals and in consideration of the social, educational, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's effective use of the AAC system. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All AAC devices and related equipment are used and maintained in accordance with the manufacturer's specifications, and warranty and repair options for AAC devices are communicated to those involved in implementing the program.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness of the AAC system within the WHO framework of body structures/functions, activities/ participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#28. PROSTHETIC/ADAPTIVE DEVICE ASSESSMENT

Prosthetic/adaptive device assessment is provided to evaluate, select, and/or dispense a prosthetic/adaptive device to improve functional communication, including associated activities and participation, and context barriers and facilitators.

Prosthetic/adaptive device assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Prosthetic/adaptive device assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments as members of collaborative teams that include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe:

- underlying strengths and deficits related to the use of prosthetic/adaptive device as it affects communication and/or swallowing performance;
- effects of using a prosthetic/adaptive device on the individual's activities (capacity and performance in everyday communication contexts) and participation;

- contextual factors that serve as barriers to or facilitators of successful communication/swallowing and participation for individuals using prosthetic/ adaptive devices.

Assessment is conducted to determine whether a patient/client is a candidate for prosthetic/adaptive devices to enhance functional communication and/or swallowing, or whether the patient's/client's prosthetic/adaptive device is effective. Such devices include palatal lifts, obturators, artificial larynges, tracheoesophageal fistulization prostheses, and tracheostomy speaking valves.

Assessment may result in the following:

- Recommendations for a device and/or dispensing a device that is appropriately matched to a patient's/client's physical, cognitive, perceptual, and linguistic capabilities.
- Description of the prosthetic/adaptive device(s) selected and the impact on functional communication and/or swallowing.
- Prognosis for change (in the individual and/or relevant contexts).
- Recommendations for intervention and support, or identification of the effectiveness of intervention and supports to ensure the adaptation, correct use and maintenance of the selected prosthetic/adaptive device.
- Recommendations for monitoring the continuing need for the device and/or monitor the correct, efficient, and effective use of the device.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that the individual has functional communication/swallowing impairments that may be improved by prosthetic/ adaptive devices relative to the individuals' educational, social, vocational, or health needs affecting their body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech-language screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, communication/swallowing activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status
- Relevant case history information, including medical status, education, vocation, and cultural and linguistic background.
- Standardized and/or nonstandardized methods.
- Selection of standardized measures for prosthetic/adaptive device assessment with consideration for documented ecological validity;
- Follow-up services to monitor status and ensure appropriate intervention and support for individuals with identified needs for prosthetic/adaptive devices.
- Inform the patient/client and family/caregivers about cost considerations and the safety and health implications of device use.
- Compliance with dispensing practices of existing federal and state statutes and regulations.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting, or other natural environment conducive to eliciting a representative sample of the patient's/ client's communication using a prosthetic/adaptive device. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications. Equipment is updated and customized as appropriate. Sufficient diversity of devices and prosthetic options are available to permit an appropriate match of technology to patient/client need.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, fitting of a device,

follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., prosthesis fitting, follow-up monitoring) required.

Documentation includes a rationale for the preferred prosthetic/adaptive device; a description of device characteristics; procedures involved in the assessment of the device; consultation with other disciplines, as appropriate; counseling provided to the patient/client; and the patient's/client's response.

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Position statement and guidelines for oral and oropharyngeal prostheses. *Asha, 35*(Suppl. 10), 14–16.

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#29. PROSTHETIC/ADAPTIVE DEVICE INTERVENTION

Intervention services are conducted to assist individuals to understand, use, adjust, and restore their customized prosthetic/adaptive device (e.g., palatal lifts, obturators, artificial larynges, tracheoesophageal fistulization prostheses, and tracheostomy speaking valves).

Prosthetic/adaptive device interventions (e.g., fitting, orientation, modification, repair) are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Prosthetic/adaptive device interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to-

- capitalize on strengths and address weaknesses related to the use of a prosthetic/adaptive device as it affects communication and/or swallowing;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies using the device;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication/swallowing and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Prosthetic/adaptive device interventions are prompted by referral or by the results of a prosthetic/adaptive device assessment or when malfunction or reduced benefit of a device is reported. Individuals of all ages receive intervention services when their ability to communicate or swallow effectively is impaired and when there is a reasonable expectation of benefit to the individual in body structure/function and/ or activity/participation through the use of a prosthetic/adaptive device.

Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Depending on assessment results, intervention addresses the following:

- Providing of timely information and guidance to patients/clients, families/ caregivers, and other significant persons about the prosthetic/adaptive device, the course of intervention, an estimate of intervention duration, and prognosis for effective communication/swallowing.
- Education in device operation and maintenance for optimum patient/client usage, and provision of information about safety and instrument warranty;
- Procedures to facilitate the repair, maintenance, and modification of products, and verification of the changes made.

Practices are in compliance with the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and existing federal and state statutes and regulations, including state regulations specific to assistive device technology.

Intervention is long enough to accomplish stated objectives/predicted outcomes. The intervention period does not continue when there is no longer any expectation for further benefit.

Intervention is responsive to the abilities, needs, and preferences of the patient/ client and of those with whom the patient/client will communicate (e.g., family, caregivers, educators, service providers). It also considers the environment in which the prosthetic/adaptive device will be routinely used.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of clinical or educational settings, and other natural environments that are selected on the basis of

intervention goals and in consideration for the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's communication/swallowing. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- A rationale for the preferred prosthetic/adaptive device, a description of device characteristics, a description of an intervention plan, and the patient's/client's response to the plan.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, communication activities/ participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#30. FLUENCY ASSESSMENT

Fluency assessment is provided to evaluate aspects of speech fluency (strengths and weaknesses), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Fluency assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Fluency assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying strengths and deficits related to fluent and disfluent behaviors that affect communication performance;
- effects of fluency impairments on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with fluency impairments.

Assessment may result in the following:

- Diagnosis of a fluency disorder.
- Clinical description of the characteristics of fluent and disfluent behaviors.
- Identification of a communication difference, possibly co-occurring with a fluency disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Fluency assessment services are provided to children or adults who are at risk for stuttering or cluttering as needed, requested, or mandated or when other evidence suggests that individuals have fluency impairments affecting their body structure/ function and/or activitie s/participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech and language screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive fluency assessment is sensitive to cultural and linguistic diversity and addresses the components within the World Health Organization framework including body structures/functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, language, and cognitive status.
- Collection of relevant case history information (including medical status, education, vocation, and socio-economic, cultural, and linguistic background) through questionnaires and/or interviews of individuals and family/caregivers.
- Standardized and/or non-standardized methods for describing the quantitative and qualitative features of the individual's fluency or disfluency, selected with consideration for ecological validity, including –
    - stuttering severity, attitudes toward stuttering and speech, speech naturalness, self-efficacy as a speaker, situational fears, and avoidance behaviors;
    - categories of disfluency, extent of fluency or nonfluency, and the presence and type of secondary behaviors;
    - identification and counting of the frequency of primary and secondary stuttering behaviors;
    - speech rate;
    - instrumental measurements of oral, laryngeal, and respiratory behavior, if indicated;
    - other features of communication function, such as muscular tension, emotional reactivity to speech or stuttering behaviors, coping behaviors, nonverbal aspects of communication, or anomalies of social interaction.
- Assessment of variables that affect fluency, such as reduced rate; interviewing patient/client or family/caregivers about social circumstances, words, listeners, sentence types, and/or speech sounds that present difficulty; modification of interaction style; and/or trial treatment services.
- Elicitation and use of prognostic information and information that optimizes treatment planning.
- Communication and interpretation of assessment results and recommendations to relevant professionals, the patient/client, and/or the family and significant others.
- Provision of follow-up services to monitor fluency status and to ensure appropriate treatment.
- Follow-up services to monitor cognitive-communication status and ensure appropriate intervention and support for individuals with identified fluency disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in clinical or educational setting and/or other natural environments conducive to eliciting a representative sample of the patient's/ client's speech production. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When intervention is recommended, information is provided concerning frequency, estimated duration, and type of service.

Documentation addresses the type and severity of stuttering-like and nonstuttering- like disfluencies, secondary mannerisms, and associated conditions (e.g., educational and medical diagnoses).

Documentation describes the impact of the fluency pattern on activity/participation and contextual factors that act as barriers and facilitators.

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

American Speech-Language-Hearing Association. (1995). Guidelines for practice in stuttering treatment. *Asha, 37*(Suppl. 14), 26–35.

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#31. FLUENCY INTERVENTION

Fluency intervention is provided to improve aspects of speech fluency and concomitant features of fluency disorders in ways that optimize activity/ participation.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Fluency interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect communication;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies that result in improved speech behaviors and attitudes.
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved fluency abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Fluency interventions are prompted by referral, mandates and/or by the results of a fluency assessment. Individuals of all ages receive treatment and/or consultation services when their ability to communicate effectively is impaired because of a fluency disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

Speech-language pathologists also may provide services aimed at enhancing fluency abilities and participation in communication activities, if so requested, when a communication difference is present.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families/caregivers, and other significant persons about fluency development and disorders, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Depending on assessment results, intervention addresses the following:

- Provide information and guidance to patients/clients, families, and other significant persons about the nature of stuttering, normal fluency and disfluency, and the course of intervention and prognosis for recovery.
- Complexities of a fluency disorder, including possible reactions.
- Defensive behaviors, coping strategies of the person who has the fluency disorder, and the reactions of significant others in the listening environment.
- Reduction of the frequency with which stuttering behaviors occur without increasing the use of other behaviors that are not a part of normal speech production.
- Reduction of the severity, duration, and abnormality of stuttering-like disfluencies in multiple communication contexts.
- Reduction of the use of defensive behaviors (e.g., avoidance behaviors).
- Removal or reduction of barriers serving to create, exacerbate, or maintain stuttering behaviors (e.g., parental reactions, listener reactions, client perceptions).
- Assisting the person who stutters to communicate in educational, vocational, and social situations in ways that optimize activity/participation.
- Reduction of attitudes, beliefs, and thought processes that interfere with fluent speech production or that hinder activity/participation.
- Reduction of emotional reactions to specific stimuli when they have a negative impact on stuttering-like disfluencies, attempts to modify stuttering behavior, and/or activity/participation.

- Development of plans, including referral, for problems other than stuttering that may accompany the fluency disorder, such as cluttering, learning disability, language/phonological disorders, voice disorders, emotional disturbance.

Intervention is long enough to accomplish stated objectives/predicted outcomes. The intervention period does not continue when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in clinical, educational, and other natural environments that are selected on the basis of intervention goals. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's communication. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: Instrumentation may be used to decrease the frequency and severity of disfluencies, or to evaluate and monitor the articulatory, laryngeal, and respiratory dynamics addressed in the treatment process. All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

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#32. MOTOR SPEECH ASSESSMENT–ADULTS

Assessment of motor speech disorders in adults is provided to evaluate motor speech functioning and disorders (strengths and weaknesses) for adults, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Motor speech assessment for adults is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Assessments of motor speech disorders are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments as a member of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe -

- underlying strengths and deficits related to structural and physiologic factors that affect motor speech and communication performance;
- effects of the motor speech disorder on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with motor speech disorders.

Assessment may result in the following:

- Diagnosis of a motor speech disorder.
- Description of the characteristics of the motor speech disorder, including problems in respiration, phonation, articulation, resonance, and prosody.
- Identification of a communication difference, possibly co-occurring with a motor speech disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Motor speech assessment services are provided to adults as needed, requested, or mandated or when other evidence suggests that they have speech impairments affecting body structure/function and/or activities/participation. Assessment is prompted by referral, by the adult's medical status, or by failing a speech-language screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework, including body structures/ functions, activities/participation, and contextual factors.

Assessment procedures may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains); and/or dynamic (i.e., using hypothesis-testing procedures to identify potentially successful intervention and support procedures) and include the following:

- Review of auditory, visual, motor, cognitive, language, and emotional status.
- Relevant case history, including medical status, education, vocation, and socioeconomic, cultural and linguistic backgrounds.
- Patient's/client's report of areas of concern, contexts of concern (e.g., social, vocational, and/or educational), and goals and preferences.
- Examination of the structure and function of the oral motor mechanism in nonspeech and speech activities including assessment of muscle tone, muscle strength, motor steadiness, and speed, range, and accuracy of motor movements.
- Auditory perceptual assessment of speech characteristics including assessment of the phonatory-respiratory system (pitch, loudness, voice quality), resonance, articulation, and prosody.
- An estimate of intelligibility in structured and unstructured contexts.

- Analysis of natural speech samples in contexts indicated as areas of concern in history and interviews;
- Instrumental analyses, if indicated, to provide acoustic and physiologic measures of speech.
- Identification of potential for effective compensatory techniques and strategies including the use of augmentative and alternative communication (AAC), and associated barriers and facilitators.
- Appropriate materials and approaches to the individual's chronological or developmental age, medical status, physical and sensory abilities, education, vocation, cognitive status, and cultural, socioeconomic, and linguistic backgrounds.
- Selection of standardized measures for motor speech assessment with consideration for documented ecological validity;
- Follow-up services to monitor speech status and to ensure appropriate intervention and support for individuals with identified motor speech disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical and/or natural environment conducive to eliciting a representative sample of the patient/client's speech functioning. The goals of the assessment and the WHO framework are considered in selecting assessment settings.

Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment is used and monitored in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before re-use are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program) required.

Documentation addresses the type and severity of the motor speech disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation may include a portfolio of the adult's communication samples (e.g., transcripts; audiotaped or videotaped speech samples).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

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World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#33. MOTOR SPEECH INTERVENTION—ADULTS

Intervention services are provided to adults with motor speech disorders, including problems in areas of respiration, phonation, articulation, resonance and prosody.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Interventions for motor speech disorders in adults are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect communication;
- facilitate the individual's activities and participation by assisting the person to acquire new skills and strategies;
- modify contextual factors that serve as barriers and enhance facilitators of successful communication and participation including development and use of appropriate accommodations.

Intervention is expected to result in reduced deficits and contextual barriers, improved abilities and contextual facilitators, and measurably enhanced functioning and participation. Intervention also may result in recommendations for speech reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Intervention for motor speech disorders is prompted by the results of a motor speech assessment. Adults receive treatment and/or consultation services when their ability to communicate effectively is impaired because of a speech disorder or difference, and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity

and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing timely information and guidance to patients/ clients, family/caregivers, and other significant persons about the motor speech disorder, and the course of treatment and prognosis for recovery.

Intervention addresses the complexities of a motor speech disorder, including possible reactions, defensive behaviors, and coping strategies of the person who has the speech disorder and the reactions of significant others in the environment in a manner that is sensitive cultural and linguistic diversity.

Depending on assessment results, intervention addresses the following:

- Improve the intelligibility of speech by –
    - increasing respiratory support for speech,
    - improving laryngeal function and subsequent pitch, loudness, and voice quality,
    - managing velopharyngeal inadequacy,
    - normalizing muscle tone and increasing muscle strength of the oral motor structures.
- Improve accuracy, precision, timing, and coordination of articulation.
- Rate modification.
- Improve prosody and naturalness of speech.
- Inclusion of direct behavioral treatment techniques, use of prosthetics, or appropriate referral for medical-surgical or pharmacologic management.
- Development and use of effective compensatory articulation strategies and/or communication strategies, or referral for augmentative and alternative communication (AAC) assessment, as appropriate.
- Train others in the individual's environment to use communication strategies and cuing techniques to support improved speech production.
- Development of plans, including referral, for problems other than in motor speech that may accompany the disorder, such as hearing or visual difficulties, language or cognitive disorders, and emotional disturbance.

Intervention is long enough to accomplish stated objectives/predicted outcomes. The treatment period ends when there is no longer any expectation for further benefit. Clinicians provide to patients/clients and their families/caregivers an estimate of treatment duration.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including clinical and natural environments that are selected on the basis of intervention goals and in considerations of the social, academic and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's motor speech function. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Position statement and guidelines for oral and oropharyngeal prostheses. *Asha, 35*(Suppl. 10), 14–16.

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World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#34. VOICE ASSESSMENT

Voice assessment is provided to evaluate vocal structure and function (strengths and weaknesses), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Voice assessments are conducted by appropriately credentialed and trained speech- language pathologists.

EXPECTED OUTCOME(S)

Consistent with World Health Organization (WHO) framework, assessment is conducted to identify and describe -

- underlying strength and deficits related to a voice disorder or a laryngeal disorder affecting respiration and communication performance;
- effects of the voice disorder on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with voice disorders or laryngeal disorders affecting respiration.

Assessment may result in the following:

- Diagnosis of a voice disorder or laryngeal disorder affecting respiration.

- Description of perceptual phonatory characteristics.
- Measurement of aspects of vocal function.
- Examination of phonatory behavior.
- Identification of a communication difference possibly co-occurring with a voice or laryngeal disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Voice assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that individuals have voice or laryngeal disorders affecting body structure/function and/or activities/ participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

All patients/clients with voice disorders are examined by a physician, preferably in a discipline appropriate to the presenting complaint. The physician's examination may occur before or after the voice evaluation by the speech-language pathologist.

Comprehensive assessments are sensitive to cultural and linguistic diversity and address the components within the WHO's *International Classification of Functioning, Disability, and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Relevant case history, including vocal use history, medical status, education, vocation, and cultural and linguistic backgrounds.
- Standardized and nonstandardized methods:
    - Perceptual aspects of vocal production/behavior
    - Acoustic parameters of vocal production/behavior

- Physiological aspects of phonatory behavior
- Patient' s/client' s ability to modify vocal behavior
- Emotional/psychological status
- Medical history and associated conditions
- Observation or review of articulation, fluency, and language
- Functional consequences of the voice disorder
- Use of perceptual and/or instrumental measures, including –
  - perceptual ratings
  - acoustic analysis °aerodynamic measures
  - electroglottography
  - imaging techniques such as endoscopy and stroboscopy (these procedures may be conducted and interpreted in collaboration with other professionals).

- Selection of standardized measures for voice assessment with consideration for documented ecological validity;
- Follow-up services to monitor voice status and ensure appropriate intervention and support for individuals with identified voice disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting, or other natural environment conducive to eliciting a representative sample of the patient's/ client's voice production. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications. Instrumental measures may be used to assess voice production and/or laryngeal function. Instrumental techniques ensure the validity of signal processing, analysis routines, and elimination of task or signal artifacts.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease).

Laryngeal imaging techniques and selection/placement of tracheoesophageal prostheses are conducted in settings that have access to emergency medical treatment, if needed.

Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and procedures and according to the manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program) required.

Documentation addresses the type and severity of the voice disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Position statement and guidelines for oral and oropharyngeal prostheses. *Asha, 35*(Suppl. 10), 14–16.

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American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Technical report. *ASHA Supplement 24*, 140–145.

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#35. VOICE INTERVENTION

Intervention services are provided for individuals with voice disorders, alaryngeal speech, and/or laryngeal disorder affecting respiration, including possible organic, neurologic, behavioral, and psychosocial etiologies.

Intervention is conducted consistent with the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Voice interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may perform these interventions as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOMES

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect voice production;
- facilitate the individual's activities and participation by assisting the person to acquire new communication skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is conducted to achieve improved voice production, coordination of respiration and laryngeal valving, and/or acquisition of alaryngeal speech sufficient to allow for functional oral communication.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Voice intervention is prompted by the results of a voice assessment. Individuals of all ages receive treatment and/or consultation services when their ability to communicate effectively is impaired because of a voice disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing timely information and guidance to patients/ clients, families, and significant persons about the nature of voice disorders, alaryngeal speech, and/or laryngeal disorders affecting respiration; and the goals, procedures, respective responsibilities, and the likely outcome of treatment.

Depending on assessment results, intervention addresses the following:

- The individual's preferences, goals, and special needs to enhance participation and improve functioning in life activities that the individual and family and relevant others deem important.

- Appropriate voice care and conservation guidelines, including strategies that promote healthy laryngeal tissues and voice production and reduce laryngeal trauma or strain.
- Proper use of respiratory, phonatory, and resonatory processes to achieve improved voice production, coordination of respiration and laryngeal valving, with appropriate treatment to enhance these behaviors.
- Patient/client-directed selection of preferred alaryngeal speech communication means, including development of one or more of the following alaryngeal alternatives: esophageal speech, artificial larynx speech, or tracheoesophageal prosthesis speech.
- Materials and approaches appropriate to the individual's chronological and developmental age, medical status, physical and sensory abilities, education, vocation, cognitive status, and cultural, socioeconomic, and linguistic backgrounds.
- Assistance with a voice disorder, alaryngeal speech, and/or laryngeal disorder that affects respiration to maintain treatment targets in oral communication in life activities.
- Follow-up, including interdisciplinary referrals, for other speech and health problems that may accompany the voice disorder, alaryngeal speech, and/or laryngeal disorder affecting respiration, such as medical concerns, dysarthria, swallowing difficulty, emotional disturbance, and other problems.

Intervention is long enough to accomplish stated objectives/predicted outcomes. The intervention period does not continue when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS:

Setting: Intervention may be conducted in a variety of settings, including clinical, educational, and other natural environments that are selected on the basis of intervention goals and in considerations of the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's voice production. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: When available, instrumental measures may be used in treatment to monitor progress and to provide appropriate patient/client feedback of voice production and/or laryngeal function. Instrumental techniques ensure the validity of signal processing, analysis routines, and elimination of task or signal artifacts. All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All procedures ensure the safety of the patient/ client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease).

Laryngeal imaging techniques and selection/placement of tracheoesophageal prostheses are conducted in settings that have access to emergency medical treatment, if needed.

Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and procedures and according to the manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Position statement and guidelines for oral and oropharyngeal prostheses. *Asha, 35*(Suppl. 10), 14–16.

American Speech-Language-Hearing Association. (1993). Position statement and guidelines on the use of voice prostheses in tracheotomized persons with or without ventilatory dependence. *Asha, 35*(Suppl. 10), 17–20.

American Speech-Language-Hearing Association. (2004). Evaluation and treatment for tracheoesophageal puncture and prosthesis: Technical report. *ASHA Supplement 24*, 166–177.

American Speech-Language-Hearing Association. (2004). Knowledge and skills for speech-language pathologists with respect to evaluation and treatment for tracheoesophageal puncture and prosthesis. *ASHA Supplement 24*, 166–177.

American Speech-Language-Hearing Association. (2004). Knowledge and skills for speech-language pathologists with respect to vocal tract visualization and imaging. *ASHA Supplement 24*, 184–192.

American Speech-Language-Hearing Association. (2004). Roles and responsibilities of speech-language pathologists with respect to evaluation and treatment for tracheoesophageal puncture and prosthesis. *ASHA Supplement 24*, 63.

American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Position statement. *ASHA Supplement 24*, 64.

American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Technical report. *ASHA Supplement 24*, 135–139.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#36. RESONANCE AND NASAL AIRFLOW ASSESSMENT

Resonance and nasal airflow assessment is provided to evaluate oral, nasal, and velopharyngeal function for speech production (strengths and weaknesses), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Resonance and nasal airflow assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Resonance and nasal airflow assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe —

- underlying strengths and deficits related to resonance and nasal airflow factors that affect communication performance;

- effects of resonance and nasal airflow impairments on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with resonance and nasal airflow impairment.

Assessment may result in the following:

- Diagnosis of a speech disorder.
- Clinical description of the characteristics of a resonance or nasal airflow disorder.
- Identification of a communication difference, possibly co-occurring with a resonance or nasal airflow disorder.
- Prognosis for change (in the individual or relevant contexts.
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Assessment services are provided to individuals of all ages as needed, requested, or mandated or when other evidence suggests that individuals have communication impairments affecting their body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech-language screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Relevant case history, including medical status (e.g. structural or neurological abnormalities, medical or dental treatment), education, vocation, and socioeconomic, cultural, and linguistic backgrounds.

- Perceptual and instrumental measures used to assess the oral, nasal, vocal, and velopharyngeal functions as they pertain to speech production (e.g., perceptual and acoustic analyses of the speech signal, speech articulation testing, aerodynamic measures, and imaging techniques such as videofluoroscopy and endoscopy).
- Articulatory or phonatory phenomena that may be causally related to impaired velopharyngeal function.

Videofluoroscopy and endoscopy may be conducted as part of the assessment. Collaboration with physicians, dental specialists, and other professionals is advantageous to assessment and treatment planning.

Standardized measures for resonance and nasal airflow assessment are selected with consideration for documented ecological validity.

Individuals with identified resonance and nasal airflow impairments receive follow-up services to monitor status and ensure appropriate intervention and support.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEATH PRECAUTIONS

Setting: Assessment is conducted in a clinical or educational setting, or other natural environment conducive to eliciting a representative sample of the patient's/ client's resonance and nasal airflow. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning,

disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or

referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service.

Documentation addresses the type and severity of the resonance or nasal airflow disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (2004). Knowledge and skills for speech-language pathologists with respect to vocal tract visualization and imaging. *ASHA Supplement 24*, 184–192.

American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Position statement. *ASHA Supplement 24*, 64.

American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Technical report. *ASHA Supplement 24*, 140–145.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#37. RESONANCE AND NASAL AIRFLOW INTERVENTION

Intervention services are provided for individuals with resonance or nasal airflow disorders, velopharyngeal incompetence, or articulation disorders caused by velopharyngeal incompetence and related disorders such as cleft lip/palate.

Intervention is conducted consistent with the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Interventions are conducted by appropriately credentialed and trained speech- language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may perform these interventions as members of collaborative, interdisciplinary teams that may include the individual, family/ caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOMES

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect resonance and nasal airflow;
- facilitate the individual's activities and participation by assisting the person to acquire new communication skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is conducted to achieve improved resonance and nasal airflow and improved articulation sufficient to allow for functional oral communication.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

A resonance and nasal airflow intervention is prompted by the results of a resonance and nasal airflow assessment. Individuals of all ages receive intervention and/or consultation services when their ability to communicate effectively is impaired because of a resonance and nasal airflow or related articulation disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and significant persons about the nature of resonance and nasal airflow disorders, velopharyngeal function/dysfunction, and/or related articulation disorders affecting the goals, procedures, respective responsibilities, and the likely outcome of treatment.

Depending on assessment results, intervention addresses the following:

- Preferences, special needs, and goals for enhancing participation and improving function in life activities that the individual, family/caregivers, and relevant others deem important.
- Treatment to enhance appropriate articulatory behaviors.
- Consultation and/or collaboration with an interdisciplinary team of specialists in resonance and nasal air flow disorders, velopharyngeal function/ dysfunction, and cleft lip/palate.
- Follow-up, including interdisciplinary referrals, for other speech, medical, dental and health problems that may accompany the resonance disorder, cleft lip/palate, and other problems.

Materials and approaches are appropriate to the individual's chronological and developmental age, medical status, physical and sensory abilities, education, vocation, cognitive status, and socioeconomic, cultural, and linguistic backgrounds.

Intervention extends long enough to accomplish stated objectives/predicted outcomes.

The intervention period ends when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including educational and medical, that are selected on the basis of intervention goals and in consideration of the social, academic, and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's voice production. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: When available, instrumental measures may be used in intervention to monitor progress and to provide appropriate patient/client feedback of resonance/nasal airflow production and/or articulation function. Instrumental techniques ensure the validity of signal processing, analysis routines, and elimination of task or signal artifacts. All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All procedures ensure the safety of the patient/ client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease).

Endoscopic imaging of the velopharyngeal structures is conducted in settings that have access to medical personnel.

Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and procedures and according to the manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1993). Position statement and guidelines for oral and oropharyngeal prostheses. *Asha, 35*(Suppl. 10), 14–16.

American Speech-Language-Hearing Association. (2004). Knowledge and skills for speech-language pathologists with respect to vocal tract visualization and imaging. *ASHA Supplement 24*, 184–192.

American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Position statement. *ASHA Supplement 24*, 64.

American Speech-Language-Hearing Association. (2004). Vocal tract visualization and imaging: Technical report. *ASHA Supplement 24*, 135–139.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#38. OROFACIAL MYOFUNCTIONAL ASSESSMENT

Orofacial myofunctional assessment is provided to evaluate orofacial myofunctional functioning (strengths and weaknesses), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Orofacial myofunctional assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Orofacial myofunctional assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe:

- underlying strengths and deficits related to orofacial myofunctional factors that affect communication and swallowing performance;
- effects of orofacial myofunctional impairments on the individual's activities (capacity and performance in everyday communication and eating contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with orofacial myofunctional impairments.

Assessment may result in the following:

- Diagnosis of an orofacial myofunctional disorder.
- Clinical description of the characteristics of orofacial myofunctional disorder.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Orofacial myofunctional assessment services are provided to children or adults as needed, requested, or mandated or when other evidence suggests that individuals have impairments affecting their body structure/function and/or activities/ participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech-language or swallowing screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review auditory, visual, motor, and cognitive status.
- Relevant case history, including review of medical history and status (including any structural or neurologic abnormalities), medical and dental treatment, education, vocation and socioeconomic and cultural and linguistic backgrounds.
- Observation of orofacial myofunction patterns.
- Structural assessment including observation of face, jaw, lips, tongue, teeth, hard palate, soft palate, and pharynx.
- Perceptual and instrumental diagnostic procedures to assess oral and nasal airway functions as they pertain to orofacial myofunctional patterns, swallowing, and/or speech production (e.g., speech articulation testing, aerodynamic measures).
- Articulatory phenomena that may be causally related to orofacial myofunctional disorders.
- Collaboration with physicians, dental specialists, and other professionals, which is advantageous to assessment and treatment planning.
- Follow-up services to monitor status and ensure appropriate treatment for patients/clients with identified orofacial myofunctional disorders.
- Selection of standardized measures for orofacial myofunctional assessment with consideration for documented ecological validity.
- Follow-up services to monitor status and ensure appropriate intervention and support for individuals with identified orofacial myofunctional disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or natural environment conducive to eliciting a representative sample of the patient's/client's orofacial myofunctional patterns. The goals of the assessment and the WHO framework are considered in selecting assessment settings.

Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service.

Documentation addresses the type and severity of the orofacial myofunctional disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of the assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to the referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1989). Report: Ad hoc committee on labial-lingual posturing function. *Asha, 31*(11), 92–94.

American Speech-Language-Hearing Association. (1991). The role of the speech-language pathologist in assessment and management of oral myofunctional disorders. *Asha, 33* (Suppl. 5), 7.

American Speech-Language-Hearing Association. (1993). Orofacial myofunctional disorders: Knowledge and skills. *Asha, 35*(Suppl. 10), 21–23.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#39. OROFACIAL MYOFUNCTIONAL INTERVENTION

Intervention services are provided to individuals with orofacial myofunctional disorders.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Orofacial myofunctional interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to:

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect the individual's orofacial myofunctional patterns and related speech and swallowing patterns;
- facilitate the individual's activities and participation by assisting the person to acquire new orofacial myofunctional skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Orofacial myofunctional intervention is prompted by referral and/or by the results of an orofacial myofunctional assessment. Individuals above the age of 4-years receive treatment and/or consultation services when their ability to communicate and swallow effectively is impaired because of an orofacial myofunctional disorder and when there is a reasonable expectation of benefit to the individual in body

structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

Speech-language pathologists may also provide intervention when an orofacial myofunctional disorder results in a communication difference.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and other significant persons about orofacial myofuctional impairments, the course of intervention, an estimate of intervention duration, and prognosis for improvement. Orofacial myofunctional intervention may be conducted concurrently with other speech-language pathology services.

Depending on assessment results, intervention addresses the following:

- The alteration of lingual and labial resting postures.
- Muscle retraining exercises.
- Modification of handling and swallowing of solids, liquids, and saliva.

Short- and long-term functional goals and specific objectives are reviewed periodically to determine appropriateness.

Treatment provides information and guidance to patients/clients, families/ caregivers, and other significant persons about the nature of orofacial myofunctional patterns, and the course of recovery and prognosis for improvement.

Intervention extends long enough to accomplish stated objectives/predicted outcomes. The intervention period ends when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including clinical and natural environments that are selected on the basis of intervention goals and in consideration of the social, academic and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's orofacial myofunctional patterns. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1989). Report: Ad hoc committee on labial-lingual posturing function. *Asha, 31*(11), 92–94.

American Speech-Language-Hearing Association. (1991). The role of the speech-language pathologist in assessment and management of oral myofunctional disorders. *Asha, 33* (Suppl. 5), 7.

American Speech-Language-Hearing Association. (1993). Definitions of communication disorders and variations. *Asha, 35*(Suppl. 10), 40–41.

American Speech-Language-Hearing Association. (1993). Orofacial myofunctional disorders: Knowledge and skills. *Asha, 35*(Suppl. 10), 21–23.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#40. SWALLOWING AND FEEDING ASSESSMENT—CHILDREN

Swallowing and feeding assessment in children is provided to evaluate swallowing and feeding function (strengths and weaknesses) in infants, toddlers, and children, including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Swallowing and feeding assessment in children is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Swallowing and feeding assessments in children are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessments are conducted to identify and describe –

- underlying strengths and deficits related to body/structural factors that affect swallowing and feeding performance;
- effects of swallowing and feeding impairments on the individual's activities (capacity and performance in everyday contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful eating for individuals with impairment.

Assessment may result in the following:

- Diagnosis of a disorder of swallowing and/or feeding function.
- Clinical description of the characteristics of the disorder, including related functions that affect it (e.g., airway, neurologic, respiratory, gastrointestinal, behavioral, nutritional, craniofacial).
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Swallowing and feeding assessment services are provided to infants, toddlers, and children as needed, requested, or mandated or when other evidence suggests that individuals have swallowing and/or feeding impairments affecting their body structure/function and/or activities/participation.

Assessment is prompted by referral, by the individual's medical status, or by failing a speech-language or swallowing screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Collection of relevant case history information, including medical status, education, and socioeconomic, cultural, and linguistic backgrounds.
- Standardized and/or nonstandardized assessments, to include —
    - structural assessment of face, jaw, lips, tongue, jaw, hard and soft palate, oral pharynx and oral mucosa;
    - functional assessment of muscles and structures used in swallowing, including symmetry, sensation, strength, tone, range, and rate of motion, and coordination of movement. Observation of head-neck control, posture, developmental reflexes, and involuntary movements noted in context of the child's developmental level;
    - functional assessment of swallowing ability, including suckling, sucking, mastication, oral containment and manipulation of the bolus;
    - impression of airway adequacy and coordination of respiration and swallowing;
    - assessment of saliva management, including frequency and adequacy of spontaneous dry swallowing and ability to swallow voluntarily;
    - assessment of behavioral factors, including acceptance of pacifier, nipple, spoon, cup, and range and texture of food/liquids as tolerated and developmentally appropriate.
- Instrumental diagnostic procedures that are age-appropriate with regard to positioning, presentation (e.g., spoon, cup, or nipple; fed or self-feeding), and viscosity of material:
    - Videofluoroscopic swallow study
    - Endoscopic evaluation of swallowing
    - Ultrasound
- Interdisciplinary consultation, family and team interaction, and collaboration with physicians and other professionals.

- Follow-up services to monitor status and ensure appropriate intervention and support for individuals with identified swallowing and feeding disorders.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or natural environment conducive to eliciting a representative sample of the patient's/client's swallowing and feeding. The goals of the assessment and the WHO framework are considered in selecting assessment settings.

Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service.

Documentation addresses the type and severity of the swallowing and feeding disorder and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

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#41. SWALLOWING AND FEEDING INTERVENTION—CHILDREN

Intervention services are provided for infants, toddlers, and children with swallowing and feeding disorders.

Intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Swallowing and feeding interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists provide these services individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect swallowing;

- facilitate the individual's activities and participation by assisting the child/ caregiver to acquire new skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful swallowing and feeding, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and/or contextual facilitators. Intervention also may result in recommendations for speech-language reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Swallowing and feeding interventions are prompted by referral and/or by the results of a swallowing and feeding assessment. Infants, toddlers, and children receive treatment and/or consultation services when their ability to take oral nutrition is impaired because of a swallowing and feeding disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and other significant persons about swallowing and feeding, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Depending on assessment results, intervention addresses the following:

- Support of adequate hydration and nutrition.
- Minimize the risk of pulmonary complications.
- Facilitate coordinated movements of the oral/pharyngeal mechanism and respiratory system.
- Techniques for modifying behavioral and sensory issues that interfere with feeding and swallowing.

Intervention extends long enough to accomplish stated objectives/predicted outcomes. The intervention period ends when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings, including clinical, educational, or other natural environments that are selected on the basis of intervention goals and in considerations of the

social, academic and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's swallowing and/or feeding. The goals of the assessment and the WHO framework are considered in selecting assessment settings.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

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#42. SWALLOWING FUNCTION ASSESSMENT–ADULTS

Swallowing function assessment is provided to evaluate oral, pharyngeal, and related upper digestive structures and functions to determine swallowing functioning and oropharyngeal/respiratory coordination (strengths and weaknesses), including identification of impairments, associated activity and participation limitations, and context barriers and facilitators.

Swallowing function assessment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Swallowing function assessments are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists may perform these assessments individually or as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- normal and abnormal parameters of structures and functions affecting swallowing;
- effects of swallowing impairments on the individual's activities (capacity and performance in everyday contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful swallowing and participation for individuals with swallowing impairments.

Assessment may result in the following:

- Diagnosis of a swallowing disorder.
- Clinical description of the characteristics of swallowing disorders.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports.
- Referral for other assessments or services.

CLINICAL INDICATIONS

Assessment services are provided to adults as needed, requested, or mandated or when other evidence suggests that individuals have swallowing impairments affecting their body structure/function and/or activities/participation.

Assessment may be prompted by referral, by the individual's medical status, or by failing a swallowing or speech screening that is sensitive to cultural and linguistic diversity.

CLINICAL PROCESS

Swallowing assessment is sensitive to cultural and linguistic diversity and addresses the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history information, including medical status, education, vocation, and socioeconomic, cultural and linguistic background.
- Review of auditory, visual, motor, and cognitive status.
- Noninstrumental, clinical assessment, including —
    - structural assessment of face, jaw, lips, tongue, teeth, hard and soft palate, oral pharynx, and oral mucosa;
    - functional assessment of physiologic functioning of the muscles and structures used in swallowing, including observations of symmetry, sensation, strength, tone, range and rate of motion, and coordination or timing of movement. Also, observation of head-neck control, posture, developmental reflexes, and involuntary movements. *Note*: Direct observations of the pharynx (other than the oral pharynx) and larynx are not possible without instrumentation;
    - functional assessment of actual swallowing ability, including observation of sucking, mastication, oral containment and manipulation of the bolus; impression of the briskness of swallow initiation; impression of extent of laryngeal elevation during the swallow, signs of aspiration such as coughing or wet-gurgly voice quality after the swallow;
    - impression of adequacy of airway protection and coordination of respiration and swallowing;
    - assessment of saliva management including frequency and adequacy of spontaneous dry swallowing and ability to swallow voluntarily;

- Instrumental assessment (e.g., videofluoroscopy, endoscopy, ultrasound, manometry, electromyography, etc.), including any or all of the following:
    - Structural assessment, including observation of face, jaw, lips, tongue, teeth, hard palate, soft palate, larynx, pharynx, and oral mucosa.
    - Functional assessment of physiologic functioning of all the muscles and structures used in swallowing, including observations and measures of symmetry, sensation, strength, tone, range and rate of motion, and coordination or timing of movement. Also, observation of head-neck control, posture, developmental reflexes, and involuntary movements.
    - Functional assessment of actual swallowing ability, including observation of sucking, mastication, oral containment and manipulation of the bolus; briskness of swallow initiation; lingual, velopharyngeal, laryngeal, and pharyngeal movement during swallowing; coordination and effectiveness of these movements (e.g., is the bolus swallowed briskly and completely without any bolus entering the airway?).
    - Assessment of adequacy of airway protection; assessment of coordination of respiration and swallowing.
    - Assessment of the effect of intubation on oropharyngeal swallowing (feeding tube, tracheostomy) and the effect of mechanical ventilation on swallowing.
    - Assessment of the effect of changes in bolus size, consistency, or rate or method of delivery on the swallow.
    - Assessment of the effect of use of therapeutic postures or maneuvers on the swallow.
    - Screening of esophageal motility and gastroesophageal reflux.
- Selection of standardized measures for swallowing assessment with consideration for documented ecological validity.
- Follow-up services to monitor status and ensure appropriate intervention and support for individuals with identified swallowing disorders.
- Counseling and consultation on assessment results to address the nature and impact of the disorder or difference and engage the patient/client, family/ caregiver, and approved others (e.g., teachers/employers) in the clinical process.
- Interdisciplinary consultation, team interaction, and collaboration with physicians and other professionals.
- Assessment in conjunction with articulation/phonology assessment, voice assessment, or resonance and nasal airflow assessment, if appropriate.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in a clinical or natural environment conducive to elicit a representative sample of the patient's/client's swallowing. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications.

Safety Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, diagnosis, prognosis, and recommendations. Recommendations include a statement regarding the patient's/client's ability to eat an oral diet, and if so, with what consistencies.

Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service required (e.g., individual, group, home program).

Documentation addresses the type and severity of the disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

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#43. SWALLOWING FUNCTION INTERVENTION—ADULTS

Intervention services are provided for adults with swallowing disorders, including oral, pharyngeal, laryngeal, and upper esophageal neuromotor function and control, and coordination of respiratory function with swallowing.

Swallowing function intervention is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Swallowing interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services as members of collaborative teams that may include the individual, family/caregivers, and other relevant persons.

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to underlying structures and functions that affect swallowing;
- facilitate the individual's activities and participation by assisting the person to acquire new swallowing skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved abilities, functioning, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

Intervention is conducted to improve the individual's oral, pharyngeal, and laryngeal neuromotor function and control, and coordination of respiratory function with swallowing activities.

Intervention is conducted to directly improve the individual's ability to eat safely and efficiently (i.e., without aspiration and with effective bolus clearance) and to improve the acquisition of developmental skills for eating (e.g., the ability to chew).

Functional outcomes of intervention are to prevent pulmonary complications of aspiration, to improve functional indicators of feeding/swallowing, and to maximize pleasure of eating (without undue stress, discomfort, or effort) and quality of life.

CLINICAL INDICATIONS

Swallowing intervention is prompted by the results of a swallowing assessment. Adults receive treatment and/or consultation services when their ability to swallow effectively is impaired and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and other significant persons about swallowing, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Swallowing intervention may be integrated with communication intervention. Depending on assessment results, intervention may address the following:

- No oral presentation of food or liquids.
- Oral presentation of foods or liquids that may be of specified volume and/or consistency.
- Strategies that alter swallowing behavior (e.g., posture, rate, swallow maneuvers, learned airway protection measures).
- Techniques to improve oral, pharyngeal, and laryngeal coordination, control, speed, and strength.
- Modification of swallowing activity or alteration of bolus characteristics (e.g., volume, consistency).
- Teaching/training nursing staff or caregivers how to feed the patient optimally.
- Counseling of caregivers and patient.

Short- and long-term functional swallow goals and specific objectives are determined from assessment and represent the framework for treatment. They are reviewed periodically to determine appropriateness.

Intervention involves providing information and guidance to individuals, and other significant persons about swallowing and swallowing disorders, the course of intervention, an estimate of intervention duration, and prognosis for improvement. Intervention is long enough to accomplish stated objectives/predicted outcomes. Intervention is discontinued when there is no longer any expectation for further benefit.

Interdisciplinary consultation, team interaction, and collaboration with physicians and other professionals are integral to treatment planning and processes.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in a variety of settings including clinical and natural environments that are selected on the basis of intervention goals and in consideration of the activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the individual's swallowing. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws.

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#44. ASSESSMENT OF COGNITIVE-COMMUNICATION AND/OR LANGUAGE ABILITIES ASSOCIATED WITH AUDITORY PROCESSING DISORDERS (APD)

Services are provided to assess aspects of auditory processing involved in language development and use (strengths and weaknesses), including determining if an auditory-related cognitive-communication and/or language disorder is present and describing its parameters, associated activity and participation limitations, and context barriers and facilitators.

Assessments of APD are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Assessments of cognitive-communication and language abilities associated with auditory processing disorders are conducted by appropriately credentialed and trained speech-language pathologists.

Speech-language pathologists perform these assessments in collaborative teams that include the individual, family/caregiver, an audiologist, and other relevant individuals (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the WHO framework, assessments are conducted to identify and describe –

- underlying strengths and deficits related to the neuropsychological mechanisms that encode auditory stimuli, the perceptual dimensions that arise from the encoding, and interactions among perceptual and higher level language processes and executive control;
- effects of APD on the individual's activity/participation (capacity in ideal situations and performance in everyday communication contexts);

- contextual factors that serve as barriers to and facilitators of communication and participation for individuals with APD.

Assessment may result in the following:

- Delineation of the cognitive-communication and/or language factors that may be associated with an auditory processing disorder and their impact on activity/ participation in multiple contexts (e.g., educational, social, vocational).
- Clinical description of speech perception and its interaction with other cognitive and linguistic processes and resources.
- Identification of a communication difference, possibly co-occurring with an auditory processing disorder.
- Prognosis for change (at the level of impairment, activity/participation, and context).
- Recommendations for intervention and contextual supports.
- Identification of the effectiveness of intervention and supports.
- Referral for additional audiological assessments or services.

CLINICAL INDICATIONS

Assessment of auditory processing abilities is provided to children and adults as needed, requested, or mandated or when other evidence suggests that individuals have auditory processing disorders associated with their body structure/function and communication activities/participation.

Assessment is prompted by referral, by the individual's medical or educational status, following auditory processing testing by an audiologist, or by failing a speech-language screening conducted with sensitivity to cultural and linguistic diversity.

CLINICAL PROCESS

Comprehensive assessment is sensitive to cultural and linguistic diversity and addresses the components within the *World Health Organization's International Classification of Functioning, Disability and Health* (2001) framework including body structures/functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe current levels of functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Relevant case history, including medical status, education, vocation, and socioeconomic, cultural, and linguistic background.

- Review of audiometric procedures, performed by an audiologist, that are specifically designed to diagnose auditory processing disorder.
- Review of visual, motor, language, and cognitive status.
- Standardized and/or nonstandardized methods selected in consideration for ecological validity, including –
    - questionnaires and checklists,
    - formal and informal measures to assess speech and language ability, cognitive/information processing functions (attention, speech perception, memory, problem-solving), metacognitive abilities, and communication functions.

Individuals with identified auditory processing disorders receive follow-up services to monitor language and cognitive-communication status, to describe activity/participation, and to ensure appropriate intervention and support.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessment is conducted in clinical or educational settings and/or other natural environments conducive to eliciting a representative sample of the patient's/ client's auditory processing as it affects language and cognitive-communication capacity and performance. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment will be used and maintained in accordance with the manufacturer's specifications and current applicable ANSI standards.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, results and interpretation, prognosis, and recommendations. Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service.

Documentation addresses the nature and severity of cognitive-communicative and/ or language disorders or differences associated with auditory processing disorders or other educational or medical conditions.

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

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American Speech-Language-Hearing Association. (1996). Central auditory processing: Current status of research and implications for clinicial practice. *American Journal of Audiology, 5*, 41–54.

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#45. INTERVENTION FOR COGNITIVE-COMMUNICATION AND/OR LANGUAGE IMPAIRMENTS ASSOCIATED WITH AUDITORY PROCESSING DISORDERS (APD)

Intervention services are provided for children and adults with auditory processing disorders (APD) and associated impairments in language, cognitive- communication, and/or metacognitive processes that affect activity and participation.

Intervention is designed to enhance information processing, underlying cognitive- communication, linguistic, or metacognitive resources or to improve the listening environment is conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICES

Cognitive-communication and/or language intervention for individuals with APD is conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may provide these services individually or as members of collaborative teams that include the individual, family/caregivers, an audiologist, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the WHO framework, intervention is designed to –

- capitalize on strengths and address weaknesses related to underlying cognitive and linguistic structures and functions that affect the ability to attend to, perceive, remember, comprehend, and/or produce language;
- facilitate the individual's activities and participation by assisting the person to acquire new cognitive-communication and language skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Intervention is expected to result in improved auditory processing and listening abilities, language and cognitive-communication abilities, participation, and contextual facilitators. Intervention also may result in recommendations for reassessment or follow-up, or in a referral for other services.

CLINICAL INDICATIONS

Cognitive-communicative and language interventions for individuals with APD are prompted by referral, mandate and/or by the results of an APD assessment.

Individuals of all ages receive intervention, including consultation services, when their ability to communicate effectively is impaired because of an auditory processing disorder and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation. Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

Speech-language pathologists also may provide services aimed at enhancing speech perception and other cognitive-communication and language processes affecting activity/participation, when a communication difference is present.

CLINICAL PROCESS

Intervention involves gathering information from and providing information and guidance to patients/clients, families, and other significant persons about APD, cognitive-communication and

language processes, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Depending on assessment results, intervention may address the following:

- Formulation of an intervention plan based on concerns, symptoms, history, auditory processing test results, and participation in activities that have been identified as problematic.
- Enhancement of cognitive-communication and language resources for processing spoken and written language at the phoneme, word, sentence, and discourse level, and using these structures in functional contexts.
- Recommendations for optimizing the listening environment, removing barriers and enhancing facilitators of activity/participation.
- Improvement of auditory processing ability through auditory training and stimulation, language comprehension and production strategies, and/or attention to metalinguistic and metacognitive skills and strategies.
- Generalization of skills and strategies through supported practice in the natural environment.
- Counseling for individuals, family/caregivers, educators, and other relevant persons.

Intervention extends long enough to accomplish stated objectives/predicted outcomes. The intervention period ends when there is no longer any expectation for further benefit.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Intervention may be conducted in clinical or educational settings, and other natural environments that are selected on the basis of intervention goals and in consideration of the social, academic and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's auditory processing ability. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specifications: APD intervention may include assistive devices such as individual FM systems fitted by an audiologist, classroom amplification systems, or computer assisted instruction. All equipment is used and maintained in accordance with the manufacturer's specifications.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Progress toward stated goals, updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1996). Central auditory processing: Current status of research and implications for clinical practice. *American Journal of Audiology, 5*, 41–54.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#46. AURAL REHABILITATION ASSESSMENT

Aural rehabilitation assessment is provided to evaluate the impact of a hearing loss on communication functioning (strengths and weaknesses), including the identification of speech-language-communication impairments, associated activity and participation limitations, and context barriers and facilitators.

Aural rehabilitation assessments are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Aural rehabilitation assessments are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may perform these assessments as members of collaborative teams that may include an audiologist, the individual, family/ caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOME(S)

Consistent with the World Health Organization (WHO) framework, assessment is conducted to identify and describe –

- underlying strengths and deficits that affect communication performance and are related to the individual's hearing loss;
- effects of hearing loss on the individual's activities (capacity and performance in everyday communication contexts) and participation;
- contextual factors that serve as barriers to or facilitators of successful communication and participation for individuals with hearing loss.

Assessment may result in the following:

- Diagnosis of a communication impairment resulting from hearing loss.
- Clinical description of the characteristics of the communication impairments resulting from hearing loss.
- Identification of a communication difference possibly co-occurring with communication impairments resulting from a hearing loss.
- Prognosis for change (in the individual or relevant contexts).
- Recommendations for intervention and support.
- Identification of the effectiveness of intervention and supports, or referral for other assessments or services.

CLINICAL INDICATIONS

Aural rehabilitation assessment services are provided to adults and children as needed, requested, or mandated or when evidence suggests that individuals have communication impairments resulting from hearing loss affecting their speech- language structure/function, communication activities, or participation.

Assessment may be prompted by referral or by failing a speech and language screening that is sensitive to cultural and linguistic diversity.

Assessment of speech-language factors associated with hearing loss is consistent with the results of an audiologic assessment; hearing aid or assistive system/device assessment, fitting, or orientation; or sensory aid assessment conducted by an audiologist.

CLINICAL PROCESS

Comprehensive assessments are sensitive cultural and linguistic diversity and address the components within the WHO's *International Classification of Functioning, Disability and Health* (2001) framework including body structures/ functions, activities/participation, and contextual factors.

Assessment may be static (i.e., using procedures designed to describe functioning within relevant domains) or dynamic (i.e., using hypothesis testing procedures to identify potentially successful intervention and support procedures) and includes the following:

- Review of auditory, visual, motor, and cognitive status.
- Relevant case history information, medical status, education, vocation, and socioeconomic, cultural and linguistic backgrounds.
- Standardized and/or nonstandardized methods to evaluate comprehension and production of language in oral, signed, or written modalities (reading and writing); speech and voice production; listening skills; speech reading; and communication strategies.
- Selection of standardized measures for aural rehabilitation assessment with consideration for documented ecological validity and sensitivity to cultural and linguistic diversity.
- Follow-up services to monitor communication status and ensure appropriate intervention and support for individuals with identified communication impairment resulting from hearing loss.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Assessments are conducted in a clinical or educational setting or other natural environment conducive to eliciting a representative sample of the patient's/ client's communication production. The goals of the assessment and the WHO framework are considered in selecting assessment settings. Identifying the influence of contextual factors on functioning (activity and participation) requires assessment data from multiple settings.

Equipment Specifications: All equipment is used and maintained in accordance with the manufacturer's specifications. The functioning of hearing aids, hearing assistive technology, and sensory aids are checked prior to assessment.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes pertinent background information, type of amplification system/sensory aid used with specific settings, communication modality used, assessment results and interpretation, prognosis, and recommendations.

Recommendations may include the need for further assessment, follow-up, or referral. When treatment is recommended, information is provided concerning frequency, estimated duration, and type of service (e.g., individual, group, home program) required.

Documentation addresses the type and severity of the disorder or difference and associated conditions (e.g., medical diagnoses).

Documentation includes summaries of previous services in accordance with all relevant legal and agency guidelines.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Education Rights and Privacy Act (FERPA), and other state and federal laws.

Results of assessment are reported to the individual and family/caregivers, as appropriate. Reports are distributed to referral source and other professionals when appropriate and with written consent.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (2001). Knowledge and skills required for the practice of audiologic/aural rehabilitation. In Rockville, MD: Author.

American Speech-Language-Hearing Association. (2001). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (position statement, executive summary of guidelines, technical report). *ASHA Supplement 21*, 17–28.

American Speech-Language-Hearing Association. (2002). Guidelines for audiology service provision in and for schools. In Rockville, MD: Author.

American Speech-Language-Hearing Association. (2002). Knowledge and skills needed by speech-language pathologists with respect to reading and writing in children and adolescents. *ASHA 2002 Desk Reference, 3*, 455–464.

American Speech-Language-Hearing Association. (2004). Clinical practice by certificate holders in the profession in which they are not certified. *ASHA Supplement 24*, 39–40.

World Health Organization. (2001). *International classification of functioning, disability and health*. Geneva, Switzerland: Author.

#47. AURAL REHABILITATION INTERVENTION

Intervention services are provided to improve the communication abilities of an individual with a hearing loss.

Interventions are conducted according to the *Fundamental Components and Guiding Principles*.

INDIVIDUALS WHO PROVIDE THE SERVICE(S)

Aural rehabilitation interventions are conducted by appropriately credentialed and trained speech-language pathologists, possibly supported by speech-language pathology assistants under appropriate supervision.

Speech-language pathologists may perform these interventions as members of collaborative teams that include an audiologist, the individual, family/caregivers, and other relevant persons (e.g., educators, medical personnel).

EXPECTED OUTCOMES

Consistent with the World Health Organization (WHO) framework, intervention is designed to—

- capitalize on strengths and address weaknesses related to hearing loss that affect communication;
- facilitate the individual's activities and participation by assisting the person to acquire new receptive and expressive communication skills and strategies;
- modify contextual factors to reduce barriers and enhance facilitators of successful communication and participation, and to provide appropriate accommodations and other supports, as well as training in how to use them.

Aural rehabilitation intervention results in the achievement of improved, altered, augmented, or compensated communication processes.

CLINICAL INDICATIONS

Aural rehabilitation intervention is prompted by referral and/or by the results of an aural rehabilitation assessment. Individuals (of all ages) receive treatment and/ or consultation services when their ability to communicate effectively is impaired because of a hearing loss and when there is a reasonable expectation of benefit to the individual in body structure/function and/or activity/participation.

Interventions that enhance activity and participation through modification of contextual factors may be warranted even if the prognosis for improved body structure/function is limited.

CLINICAL PROCESS

Intervention involves providing information and guidance to patients/clients, families, and other significant persons about speech-language development and processes, aural rehabilitation intervention, the course of intervention, an estimate of intervention duration, and prognosis for improvement.

Depending on assessment results and age of the patient/client, intervention addresses the following:

- Early communication development, auditory training, and emergent literacy.
- Comprehension, and production of language in oral, signed, or written modalities; speech and voice production; auditory training; speech reading; multimodal (e.g., visual, auditory-visual, and tactile) training; communication strategies; education; and counseling.
- Performance in both clinical and natural (e.g., play, educational, vocational) environments.
- Short- and long-term functional communication goals and specific objectives determined from assessment.

Intervention is long enough to accomplish stated objectives/predicted outcomes and ends when there is no expectation for further benefit during the current period of development.

Individuals involved in the implementation of the treatment plan (e.g., patient/ client, family, staff) collaborate with the speech-language pathologist regarding the components of the plan and their role(s) in it and receive consultation regarding its implementation.

Follow-up services may include re-evaluation of the patient's/client's status, referrals, and provision for continuing treatment.

The quality of care, consumer satisfaction, functional outcomes, disability scales, and utilization of services are assessed.

SETTING, EQUIPMENT SPECIFICATIONS, SAFETY AND HEALTH PRECAUTIONS

Setting: Aural rehabilitation is conducted in a variety of settings (e.g., planned physical, acoustic, and visual environments, as well as in natural environments) that are selected on the basis of intervention goals and in consideration of the social, academic and/or vocational activities that are relevant to or desired by the individual. In any setting, intervention addresses the personal and environmental factors that are barriers to or facilitators of the patient's/client's communication. There is a plan to generalize and maintain intervention gains and to increase participation in relevant settings and activities.

Equipment Specification: All equipment is used and maintained in accordance with the manufacturer's specifications. Functioning of hearing aids, assistive listening systems/devices, and sensory aids is checked prior to treatment.

Safety and Health Precautions: All services ensure the safety of the patient/client and clinician and adhere to universal health precautions (e.g., prevention of bodily injury and transmission of infectious disease). Decontamination, cleaning, disinfection, and sterilization of multiple-use equipment before reuse are carried out according to facility-specific infection control policies and services and according to manufacturer's instructions.

DOCUMENTATION

Documentation includes the following:

- Written record of the dates, length, and type of interventions that were provided.
- Pertinent background information, types of amplification system/sensory aid used with specific settings.
- Progress toward stated speech-language goals (including literacy goals, as appropriate), updated prognosis, and specific recommendations.
- Evaluation of intervention outcomes and effectiveness within the WHO framework of body structures/functions, activities/participation, and contextual factors.

The privacy and security of documentation are maintained in compliance with the regulations of the Health Insurance Portability and Accountability Act (HIPAA), the Family Education Rights and Privacy Act (FERPA), and other state and federal laws.

ASHA POLICY DOCUMENTS AND SELECTED REFERENCES

American Speech-Language-Hearing Association. (1984). Competencies for aural rehabilitation. *Asha, 26*(5), 37–41.

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American Speech-Language-Hearing Association. (1991). Amplification as a remediation technique for children with normal peripheral hearing. *Asha, 33*(Suppl. 3), 22–24.

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