



AMERICAN
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HEARING
ASSOCIATION

Knowledge and Skills Needed by Speech-Language Pathologists Providing Services to Individuals With Swallowing and/or Feeding Disorders

Dysphagia Document Review and Revision Working Group

This policy statement is a revision of a 1990 policy document entitled "Knowledge and Skills Needed by Speech-Language Pathologists Providing Services to Dysphagic Patients/Clients" by a working group chaired by Paula A. Sullivan with members Joan C. Arvedson, Cathy Lazarus, Donna S. Lundy, Gary McCullough, Lisa Newman, and Nancy B. Swigert. Janet Brown served as the National Office liaison and member of the group. Alex Johnson, 2000–2002 Vice President for Professional Practices in Speech-Language Pathology and Bonnie Martin-Harris, Coordinator of the Steering Committee of Special Interest Division 13, Swallowing and Swallowing Disorders, provided guidance and support.

Introduction

This Knowledge and Skills document is an official statement of the American Speech-Language-Hearing Association. The ASHA Scope of Practice states that the practice of speech-language pathology includes providing services for swallowing (dysphagia) and feeding problems. The Preferred Practice Patterns are statements that define universally applicable characteristics of practice. Individuals who practice independently in these areas are required to hold the Certificate of Clinical Competence in Speech-Language Pathology and abide by the ASHA Code of Ethics, including Principle of Ethics II Rule B, which states: "Individuals shall engage in only those aspects of the profession that are within their competence, considering their level of education, training, and experience."

Reference this material as: 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*, 81–88.

Index terms: Knowledge and skills, practice scope and patterns, speech-language pathology, swallowing disorders, swallowing treatment.

Associated documents: Position statement, technical report
Document type: Practice guidelines and policies

Since 1987, ASHA has developed several policy documents to recognize the role of speech-language pathologists in providing services to individuals with dysphagia and to define current practice, research needs, and requisite knowledge and skills. In order to remain current with new developments in the area of swallowing and feeding, several of the documents have been reviewed and updated. Recognizing the significant potential impact of swallowing and feeding disorders on overall health and quality of life, it is essential that speech-language pathologists possess the knowledge and skills to be proficient in their management of these disorders.

Depending on the individual's work environment and population(s) served, every speech-language pathologist will not necessarily need to develop proficiencies in all roles. Some roles are clinical and the speech-language pathologist will need to develop proficiencies based on the populations served (e.g., adult, head and neck cancer, pediatrics). Some roles are administrative in nature and would be best performed by a person with extensive experience in supervision. Achievement of proficiencies should be documented and systematic plans for attaining proficiency should be in place in settings serving individuals with swallowing and feeding problems.

Basic Competencies

The purpose of this document is to outline the knowledge and skills needed by speech-language pathologists providing services to individuals with swallowing and/or feeding disorders. These knowledge and skill areas form the basis for assessing clinical competency in this specialized area of practice. Knowledge and skills applicable to serving one population or one age group of individuals do not presume knowledge to serve individuals of other ages and/or populations.

In addition, speech-language pathologists assessing individuals with potential swallowing and/or feeding disorders and providing treatment

to individuals with such disorders should have a basic understanding of the following:

- Normal and abnormal anatomy and physiology related to swallowing function.
- Signs and symptoms of dysphagia.
- Indications for, and procedures involved with, instrumental techniques used to assist in diagnosis and management.
- Proper procedures for analyzing and integrating clinical and instrumental information into a formal diagnosis of swallowing and feeding disorders with appropriate written documentation.
- Basic management issues, including how to determine candidacy for intervention, as well as how to implement compensations and habilitative/rehabilitative therapy techniques.
- How to educate and counsel individuals with swallowing and/or feeding problems and their parents, care providers, or other supporting persons.
- Importance of quality of life issues as they relate to the individual and the individual's family.
- Ability to identify and use appropriate functional outcome measures.
- Understanding of medical issues related to swallowing and feeding disorders.

The specific knowledge and skills required to meet these basic competencies are presented in detail in the remainder of this document.

Roles and Knowledge and Skills

The following roles, knowledge bases, and skills enable the speech-language pathologist to provide a continuum of services for individuals with swallowing and/or feeding disorders appropriate to the population(s) served. Also, additional knowledge and skills areas may be necessitated by needs of the individual or complexity of his/her swallowing and feeding disorder. These areas may not be limited to the following:

1.0 Role: Identification of individuals at risk for swallowing and/or feeding disorders.

Knowledge:

- 1.a. Knowledge of normal anatomy, physiology, and pathophysiology of swallowing in a developmental framework across the age continuum;

- 1.b. Knowledge of the medical diagnoses, language skills, and mental status characteristics contributing to swallowing and/or feeding disorders across the age continuum;
- 1.c. Knowledge of nutritional intake methods (oral and nonoral) and the problems associated with each that may contribute to dysphagia or be exacerbated by dysphagia;
- 1.d. Knowledge of signs and symptoms of swallowing and/or feeding disorders in the individual's behavior, medical history, and medical status;
- 1.e. Knowledge of methods of communicating results of dysphagia screening and/or need for swallowing and feeding assessment to individual and care providers; and
- 1.f. Knowledge of assessment strategies for use with individuals with swallowing and/or feeding disorders.

Skills:

- 1.1 Recognize signs and symptoms of swallowing and feeding disorders;
- 1.2 Train caregivers to identify the presence of dysphagia and refer for swallowing and/or feeding assessment;
- 1.3 Identify cognitive, communication, behavioral, and psychological factors contributing to swallowing and/or feeding status; and
- 1.4 Determine current nutritional intake (e.g., positioning, feeding dependency, environment, diet modification, compensations).

2.0 Role: Conduct a clinical examination of the upper aerodigestive tract.

Knowledge:

- 2.a. Knowledge of normal upper aerodigestive tract structure;
- 2.b. Knowledge of normal upper aerodigestive tract function;
- 2.c. Knowledge of significance and implications of abnormal findings as they relate to swallowing and/or feeding;
- 2.d. Knowledge of strengths and limitations of the clinical examination, specifically with regard to detecting aspiration and risks for aspiration and determining treatment strategies for pharyngeal swallowing disorders;
- 2.e. Knowledge of how to provide documentation that is concise, thorough, objective, and interpretive; and

- 2.f. Knowledge of any special medical condition (e.g., pulmonary dysfunction, tracheostomy, neuromotor involvement) that may have an impact on an individual's feeding and swallowing.

Skills:

- 2.1 Identify abnormal structure;
- 2.2. Identify abnormal function;
- 2.3 Identify significant signs, symptoms, medical conditions, and medications pertinent to dysphagia;
- 2.4 Conduct an oral, pharyngeal, laryngeal, and respiratory function/expiration examination as it relates to functional assessment of swallowing and feeding;
- 2.5 Interpret examination findings;
- 2.6 Document of examination findings; and
- 2.7 Communicate examination findings to individuals, caregivers and other professionals.

3.0 Role: Conduct instrumental examination.

Knowledge:

- 3.a. Knowledge of existing instrumental techniques, including their advantages and limitations;
- 3.b. Knowledge of the variability of normal swallowing behaviors (e.g., bolus volume, viscosity, age, or gender);
- 3.c. Knowledge of techniques to modify sensory input that can be introduced during the instrumental assessment(s) to ensure a reliable and valid examination; and
- 3.d. Knowledge of how to provide documentation of results that is concise, thorough, objective, and interpretive, and involves other professionals as appropriate.

Skills:

- 3.1 Identify available and appropriate testing resources (e.g., equipment, personnel);
- 3.2 Recommend appropriate instrumentation techniques when indicated.
- 3.3 Perform appropriate instrumental assessments according to protocols used by various facilities.
- 3.4 Interpret instrumental assessment;
- 3.5 Document instrumental assessment; and
- 3.6 Communicate results of instrumental assessment to individuals, caregivers and other professionals.

- 4.0 Role:** Determination of individual's management decisions regarding methods of oral intake; risk precautions and candidacy for intervention.

Knowledge:

- 4.a. Knowledge of oral versus nonoral (e.g., parenteral and enteral) intake methods and medical risks;
- 4.b. Knowledge of existing treatment procedures;
- 4.c. Knowledge of advances in treatment procedures and potential application from other fields;
- 4.d. Knowledge of appropriateness and safety for specific intervention procedures;
- 4.e. Knowledge of ethical and quality of life issues to incorporate into decisions concerning swallowing and/or feeding management;
- 4.f. Knowledge of cognitive, communication, behavioral, psychological, cultural, and social issues that may impact swallowing and/or feeding;
- 4.g. Knowledge of the status of various medical conditions causing swallowing and/or feeding disorders and their impact on recovery, maintenance of skills, or deterioration of function.
- 4.h. Knowledge of documentation procedures; and
- 4.i. Knowledge of roles of appropriate support personnel and services.

Skills:

- 4.1. Identify acceptable and appropriate oral intake methods;
- 4.2. Develop intervention strategies appropriate to individual's medical condition, swallowing and/or feeding disorder, cognitive status and behavioral status;
- 4.3. Identify potential risks of aspiration and appropriate precautions to minimize those risks;
- 4.4. Identify measurable short- and long-term treatment goals targeting functional outcomes;
- 4.5. Document management decisions and changes in decisions over time; and
- 4.6. Identify relevant support personnel services and skills in accessing, educating, and utilizing support personnel and referral services.

5.0 Role: Provide treatment for individuals with swallowing and feeding disorders.

Knowledge:

- 5.a. Knowledge of principles and procedures pertaining to learning and behavior modification;
- 5.b. Knowledge of the anatomy and physiology of the individual's swallowing and/or feeding disorder appropriate to age and/or developmental stage;
- 5.c. Knowledge of the individual's cognitive, communication, behavioral, psychological, cultural, and social issues;
- 5.d. Knowledge of treatment strategies described in the literature including habilitative/rehabilitative techniques and compensatory strategies;
- 5.e. Knowledge of techniques to quantify change in swallowing performance and/or feeding behaviors;
- 5.f. Knowledge of outcomes data collection methods and tools;
- 5.g. Knowledge of appropriate diet choices at various points in treatment; and
- 5.h. Knowledge of different methods of food and liquid presentation, including utensils, and their impact on feeding and/or swallowing.

Skills:

- 5.1 Consult with registered dietitian concerning oral intake;
- 5.2 Identify the individual's need for habilitative/rehabilitative treatment of swallowing and feeding management;
- 5.3 Interpret the individual's response to treatment;
- 5.4 Quantify the individual's response to treatment;
- 5.5 Apply learning and behavior modification procedures;
- 5.6 Collect outcomes data for comparison to benchmark;
- 5.7 Communicate the individual's progress/status in treatment;
- 5.8 Revise treatment when appropriate;
- 5.9 Identify the individual's need for re-evaluation; and
- 5.10 Determine criteria for discharge/dismissal from treatment.

6.0 Role: Additional knowledge and skills in assessment and management of swallowing and feeding problems in infants and young children.

Knowledge:

- 6.a. Knowledge of embryology, anatomy, swallowing physiology, and neurophysiology, as well as postural and sensory bases underlying swallowing and feeding in a developmental framework;
- 6.b. Knowledge of etiologies (e.g., genetic syndromes, brain injury, metabolic disorders, gastrointestinal tract disorders that affect premature and term infants) that cause or contribute to swallowing and feeding disorders;
- 6.c. Knowledge of nutrition and consequences of undernutrition in the first 2 years of life and throughout childhood;
- 6.d. Knowledge of medical tests and procedures as they affect swallowing and feeding;
- 6.e. Knowledge of pulmonary implications and complications resulting from aspiration;
- 6.f. Knowledge of dehydration implications and complications resulting from dehydration; and
- 6.g. Knowledge of infant and early childhood development as it relates to parent-child interactions and communication.

Skills:

- 6.1 Recognize signs and symptoms of suck, swallow, and respiratory organization and disorganization;
- 6.2 Demonstrate understanding of etiologies in discussions with parents and other professionals and incorporate into the case history;
- 6.3 Demonstrating nutrition knowledge by incorporating information into the case history, communicating with team members, and making appropriate referrals;
- 6.4 Demonstrate awareness of risks for aspiration consequences through management decisions that do not place infants and young children with complex dysphagia issues at increased health risks;
- 6.5 Identify and interpret cognitive and communication levels of function as a basis for management decisions in a holistic approach to the child's environment;
- 6.6 Perform instrumental assessment appropriate for the specific age and developmental level of the infant/child;

- 6.7 Interpret instrumental assessment with regard to appropriate developmental milestones; and
- 6.8 Carry out treatment for swallowing and feeding disorders appropriate for the specific age of the infant/child.

7.0 Role: Provide education, counseling, and training to individual with a swallowing and/or feeding disorder, family, significant others, dysphagia team, health and education professionals.

Knowledge:

- 7.a. Knowledge of principles of instruction;
- 7.b. Knowledge of counseling principles; and
- 7.c. Knowledge of behavior modification principles.

Skills:

- 7.1 Identify educational and training needs;
- 7.2 Provide educational and training programs;
- 7.3 Adjust content and delivery to the level of the person being educated, counseled, or trained;
- 7.4 Develop in-service educational programs;
- 7.5 Provide counseling regarding swallowing and/or feeding disorders;
- 7.6 Provide advocacy for individuals with swallowing and/or feeding disorders;
- 7.7 Instruct non-speech-language pathology staff and other caregivers in treatment techniques, problem solving, and monitoring of the status of the individual with a swallowing and/or feeding disorder;
- 7.8 Document education, counseling, and training provided; and
- 7.9 Evaluate teaching effectiveness.

8.0 Role: Manage and/or participate in swallowing and/or feeding team.

Knowledge:

- 8a. Knowledge of the roles and responsibilities of team members in management of individuals with swallowing and/or feeding disorders;
- 8.b. Knowledge of the specialized expertise of interdisciplinary team members pertinent to evaluation and treatment of individuals with swallowing and/or feeding disorders;
- 8.c. Knowledge of techniques or processes in effective facilitation and maintenance of team communication and interaction;

- 8.d. Knowledge of team management and service delivery models;
- 8.e. Knowledge of specialized consultation needs and procedures for referral;
- 8.f. Knowledge of appropriate methods of documentation that delineate team decisions and recommendations;
- 8.g. Knowledge of data and procedures that administrators need so they can support a swallowing and/or feeding team (e.g., cost accounting and productivity factors); and
- 8.h. Knowledge of basic management and administrative procedures.

Skills:

- 8.1 Identify core team members and supportive services;
- 8.2 Facilitate team communication;
- 8.3 Maintain team focus, communication, and interaction;
- 8.4 Document team activity; and
- 8.5 Use appropriate consultation procedures to and from other team members and other services.

9.0 Role: Maintain quality control/risk management program.

Knowledge:

- 9.a. Knowledge of quality improvement policies established by accrediting bodies;
- 9.b. Knowledge of institution-specific risk management policies and procedures;
- 9.c. Knowledge of appropriate performance indicators that are evidence-based with focus on outcomes for quality improvement program development;
- 9.d. Knowledge of methods used for measuring and monitoring quality improvement goals and processes;
- 9.e. Knowledge of processes for resolution of identified problems that include collaborative team efforts;
- 9.f. Knowledge of infection control procedures;
- 9.g. Knowledge of risks and consequences of aspiration;
- 9.h. Knowledge of causes of and precipitating factors for aspiration;
- 9.i. Knowledge of ways to reduce risk of aspiration;

- 9.j. Knowledge of ASHA 's Code of Ethics and Scope of Practice for the Profession of Speech-Language Pathology;
- 9.k. Knowledge of institution-specific policies and procedures concerning professional liability;
- 9.l. Knowledge of professional and institution-specific documentation policies and procedures; and
- 9.m. Knowledge of patient safety measures and universal precautions as pertinent to specific setting and institution guidelines (e.g., CPR, suctioning, radiation safety).

Skills:

- 9.1 Identify quality improvement indicators that are appropriate to meet requirements or standards for specific accrediting bodies;
- 9.2 Perform systematic measurements and monitoring of quality improvement indicators;
- 9.3 Resolve identified problems that include collaborative team efforts;
- 9.4 Identify and communicate risk factors to individuals, family, and team members;
- 9.5 Utilize appropriate risk management procedures (e.g., resolution of identified risk factors, routine revision of quality improvement monitors); and
- 9.6 Document quality improvement plans, goals, and processes for reaching desirable outcomes.

10.0 Role: Provide discharge/dismissal planning and follow-up care.

Knowledge:

- 10.a. Knowledge of discharge criteria;
- 10.b. Knowledge of discharge needs, how to establish a team-oriented discharge plan, and coordinate required services;
- 10.c. Knowledge of determining criteria for follow-up care and establishing policies and procedures to meet identified needs;
- 10.d. Knowledge of appropriate documentation of discharge criteria, discharge plan, and follow-up care; and
- 10.e. Knowledge of how to access team recommendations pertinent to follow-up care and procedures for swallowing and/or feeding disorders and developing procedures for implementation.

Skills:

- 10.1 Identify discharge/dismissal criteria;
- 10.2 Identify discharge needs for patient and care providers;
- 10.3 Participate in team-oriented discharge planning;
- 10.4 Identify need for follow-up care, including frequency of treatment monitoring and/or re-evaluation; and
- 10.5 Document discharge criteria, discharge plan, and follow-up care.

11.0 Role: Teach and supervise persons, clinical fellows, supportive personnel, and students-in-training.

Knowledge:

- 11.a. Knowledge of previous coursework and current proficiency of the trainee;
- 11.b. Knowledge of education principles;
- 11.c. Knowledge of supervision principles;
- 11.d. Knowledge of requisite documentation requirements; and
- 11.e. Knowledge of methods of evaluating trainee performance.

Skills:

- 11.1 Identify education and clinical training needs;
- 11.2 Apply education techniques;
- 11.3 Provide supervision;
- 11.4 Document teaching and supervision; and
- 11.5 Evaluate teaching effectiveness.

12.0 Role: Provide public education and advocacy for serving individuals with swallowing and/or feeding disorders.

Knowledge:

- 12.a. Knowledge of public education sources and procedures for increasing awareness of groups with special needs;
- 12.b. Knowledge of available education resources designed to assist pertinent education and advocacy positions; and
- 12.c. Knowledge of advocacy, legal, and regulatory procedures that affect the needs of individuals with swallowing and/or feeding disorders; and
- 12.e. Knowledge of funding sources pertinent to swallowing and/or feeding disorders.

Skills:

- 12.1 Demonstrate skills in methods for public education and advocacy regarding the needs of individuals with swallowing and/or feeding disorders;
- 12.2 Provide testimony to various governmental, regulatory, and educational agencies; and
- 12.3 Provide assistance in obtaining funding for services from appropriate sources.

13.0 Role: Conduct research.

Knowledge:

- 13.a. Knowledge of existing literature in normal and disordered swallowing and/or feeding;
- 13.b. Knowledge of research design;
- 13.c. Knowledge of appropriate methods for protecting human and animal subjects and obtaining informed consent;
- 13.d. Knowledge of accurate data collection techniques;
- 13.e. Knowledge of procedures for statistical analyses and interpretation; and
- 13.f. Knowledge of scientific writing for dissemination of research findings.

Skills:

- 13.1 Obtain and interpret literature;
- 13.2 Develop and apply research design;
- 13.3 Collect data;
- 13.4 Skills in procedures for statistical analysis; and
- 13.5 Skills in writing dissemination of research findings.

Terminology

Aspiration—entry of secretions, food, or any foreign material into the airway that travels below the level of the true vocal folds. Aspiration may occur before, during, or after the pharyngeal phase of swallowing. It can also occur from reflux of gastric contents.

Bolus—food, liquid, or other material placed in the mouth for ingestion.

Dysphagia—a swallowing disorder. The signs and symptoms of dysphagia may involve the mouth, pharynx, larynx, and/or esophagus.

Enteral Feeding—Delivery of hydration and nutrients anywhere along the gastrointestinal tract.

Feeding Disorder—disordered placement of food in the mouth; difficulty in food manipulation prior to initiation of the swallow, including mastication;

and the oral stage of the swallow when the bolus is propelled backward by the tongue. In pediatrics, this term may be used to describe a failure to develop or demonstrate developmentally appropriate eating and drinking behaviors.

Ingestion/Swallow—refers to all processes, functions, and acts associated with bolus introduction, preparation, transfer, and transport.

Management—involves all aspects of evaluation, treating, counseling, and discharge planning.

Oral Intake—placement of food in the mouth; oral gestures used to prepare food for the swallow and gain pleasure from eating; and, tongue movement to initiate the oral stage of the swallow. This sometimes also refers to the amount of food or liquid the individual is able to take in by mouth.

Parenteral Feeding—Administration of nutrients via a vein. Can be through a central vein (total parenteral) or through a peripheral vein (peripheral parenteral).

Team—collection or representation of different disciplines or specialists. May be multidisciplinary, interdisciplinary, or transdisciplinary as approach to assessment and management of complex patients with swallowing and feeding disorders.

Treatment Strategy—Examples: Habilitative/rehabilitative techniques include exercises and movements designed to change swallowing physiology. Compensation strategies impose alteration in behavior (posture, rate), bolus characteristics (volume, consistency) to achieve functional swallowing. These strategies are not intended to alter swallow physiology.

Upper Aerodigestive Tract—the region involved in swallowing and breathing that includes the oral cavity, oropharynx, pharynx, larynx, upper trachea, and upper esophagus.

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