May 17, 2006

# MANAGEMENT OF PATIENTS WITH SWALLOWING (DYSPHAGIA) OR FEEDING DISORDERS

**1. PURPOSE:** This Veterans Health Administration (VHA) Directive defines the policy and procedures for the assessment, evaluation, treatment, and follow-up of patients with swallowing (dysphagia) or feeding disorders.

#### 2. BACKGROUND

- a. Swallowing disorders (dysphagia) occur in approximately 51 to 73 percent of patients with stroke and 75 percent of nursing home patients. Dysphagia is associated with increased mortality and morbidities such as malnutrition, dehydration, and pulmonary complications such as aspiration pneumonia. More than 60,000 people die annually from complications related to dysphagia, making it the sixth leading cause of death in the United States. Pneumonia accounts for about 34 percent of all stroke-related deaths and represents the third highest cause of death during the first month after a stroke. Aspiration following stroke is well known to be associated with pneumonia, sepsis and death. Pneumonia is the second most common cause of death during the acute phase of a stroke. Twenty percent of individuals with stroke-related dysphagia die from aspiration pneumonia during the first year after a stroke.
- b. The Agency for Healthcare Research and Quality (AHRQ) estimates that dysphagia resulting from neurologic disorders affects approximately 300,000 to 600,000 people each year. Approximately 51,000 of these cases are due to neurologic disorders other than stroke. Based on data from the stroke literature, AHRQ estimates that without intervention, approximately 43 to 54 percent of stroke patients with dysphagia experience aspiration; approximately 37 percent of these patients will develop pneumonia; and 3.8 percent of these patients will die of pneumonia. These adverse outcomes can be ameliorated if patients are cared for by a multi-disciplinary dysphagia diagnosis and treatment program.
- c. The incidence of aspiration pneumonia is elevated in dysphagia patients because material aspirated is heavily colonized with bacteria. Unless preventive measures are taken, individuals unable to attend adequately to the daily provision of oral hygiene rapidly develop extensive bacterial colonies around the teeth leading to colonization by respiratory pathogens. The risk becomes increasingly prevalent the longer a dependent patient resides in a health care environment. Nursing home patients with inadequate dental and denture hygiene, drug-induced xerostomia, untreated dental decay, periodontal and gingival disease, and feeding dependency are at elevated risk for aspiration-related pneumonia.
- d. About 48 percent of all acute care stroke patients with dysphagia will experience malnutrition. Malnutrition is present in about 15 percent of all patients admitted to the hospital,

increasing to about 30 percent the first week after a stroke. Malnutrition is associated with poor clinical outcomes and slower rates of recovery. Therefore, early detection and treatment of dysphagia in stroke patients is critical.

- e. Swallowing disorders may occur because of a wide variety of neurological and non-neurological conditions such as oropharyngeal or esophageal cancer; neurologic diseases such as stroke, traumatic brain injury, spinal cord injury, Parkinson's disease, multiple sclerosis, amyotrophic lateral sclerosis (ALS), and Alzheimer's disease; or decayed, painful missing teeth, poorly fitting or absent dentures. Stroke is the leading cause of neurologic dysphagia. Swallowing disorders are classified as oral stage, pharyngeal stage, and esophageal stage. Management will depend on the type of disorder.
- f. General signs of dysphagia may include difficulty swallowing, coughing during or immediately after eating or drinking, food sticking in the throat, unexplained weight loss, change in diet, recurrent pneumonia or chest congestion after eating, change in voice (wet or gurgly voice), extra effort or time needed to chew or swallow, food or liquid leaking from the mouth or getting stuck in the mouth, and regurgitation. Dysphagia may lead to poor nutrition or dehydration, aspiration pneumonia or chronic lung disease, diminished enjoyment of eating or drinking, embarrassment, or isolation in social situations involving eating. Factors associated with increased risk for developing complications due to dysphagia include poor oral hygiene and tooth decay, compromised immune system, respiratory compromise, chronic obstructive pulmonary disease (COPD), altered mental status, and neurobehavioral problems.
- g. Feeding problems, other than dysphagia, may occur when there are difficulties with transporting food to the mouth prior to initiation of the oral stage of swallowing. Feeding problems are caused by a variety of neurological, neuromuscular, psychiatric conditions and medications that affect motor control, sensory, cognitive, behavioral, and emotional aspects of self-feeding. Feeding problems due to anorexia, with or without dysphagia, are common in the geriatric population.
- h. Most feeding and swallowing disorders do not occur in isolation, but are part of a broader spectrum of disabilities requiring a multi-disciplinary approach to management. Special attention must be given to the patient's global medical and psychological status. As swallowing and feeding problems have significant impact on quality of life and medical status, and can be potentially life-threatening, early identification, comprehensive evaluation, and long-term treatment and management of swallowing and feeding problems are urgent priorities. The cost of lifestyle alterations and caregiver burden are more difficult to determine, but can have enormous impact on individuals and those who share their environment.

### i. Definitions

(1) **Assessment.** An assessment is the screening for the presence of risk factors by means of self-report, clinical history, or clinical observation.

- (2) Clinical and/or Bedside Dysphagia Examination. A clinical and bedside dysphagia examination consists of history, review of medical and clinical records, non-instrumental evaluation, and observations. It includes a structural and functional evaluation of the muscles and structures used in swallowing, functional evaluation of actual swallowing ability, and judgments of adequacy of airway protection and coordination of respiration and swallowing. It may also include an evaluation of the effect of alterations in bolus delivery or use of therapeutic postures or maneuvers. The clinical examination may include use of tools and techniques (such as cervical auscultation and pulse oximetry) to detect and monitor clinical signs of dysphagia.
- (3) **Dysphagia.** Dysphagia is a swallowing disorder. The signs and symptoms of dysphagia may involve the mouth, pharynx, larynx, or esophagus and may occur at different stages in the swallowing process. Disorders of swallowing are categorized according to the swallowing phase affected. A number of dysphagic problems can be identified during each phase of deglutition. **NOTE:** Unless otherwise noted, the term dysphagia in this Directive refers to the oral or pharyngeal stage.
- (a) <u>Oral Phase</u>. Oral-phase disorders affecting the oral preparatory and oral propulsive phases usually result from impaired control of the tongue, reduced mandibular movement, poor dentition, and difficulty chewing solid food and initiating swallows. When drinking liquids, patients may find it difficult to contain the liquid in the oral cavity before swallowing. As a result, liquid spills prematurely into the pharynx, possibly resulting in aspiration.
- (b) <u>Pharyngeal Phase.</u> When pharyngeal clearance is impaired severely, a patient may be unable to ingest sufficient amounts of food and drink for adequate nutrition and hydration. In normal patients, small amounts of food are commonly retained in the valleculae or pyriform sinus after swallowing. In case of weakness or lack of coordination of the pharyngeal muscles, or poor opening of the upper esophageal sphincter, patients may retain excessive amounts of food in the pharynx and experience aspiration after swallowing.
- (c) <u>Esophageal phase</u>. Impaired esophageal function may result in retention of food and liquid in the esophagus after swallowing. Retention may be the result of mechanical obstruction, motility disorder, or impaired opening of the lower esophageal sphincter.
- (4) **Instrumental Dysphagia Evaluation**. Instrumental evaluation includes any or all of the following: structural and functional evaluation of the muscles and structures used in swallowing; functional evaluation of actual swallowing ability; evaluation of adequacy of airway protection and coordination of respiration and swallowing; screening of esophageal motility and gastroesophageal reflux; and evaluation of the effect of changes in bolus delivery, textural alterations/bolus characteristics, or use of therapeutic postures or maneuvers. Some instrumental procedures provide comprehensive information; others provide specific information about a particular aspect of swallowing. Instrumental examinations include, but are not limited to, the videofluorscopic swallowing evaluation (VFSS) and fiberoptic endoscopic evaluation of swallowing (FEES).

- (5) **Management**. Management is an inter-disciplinary approach to care that involves all aspects of evaluating, treating, monitoring, counseling, and discharge planning.
- (6) **Oral Intake**. Oral intake refers to 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.
- (7) **Self-Feeding**. In self-feeding, arm and hand coordination is required to bring food from plate to mouth.
- (8) **Team**. Team refers to multi-disciplinary, inter-disciplinary, or trans-disciplinary collaboration of various health care practitioners with responsibility for the assessment, evaluation, treatment, management, and follow-up of complex patients with swallowing or feeding disorders.
- **3. POLICY:** It is VHA policy that all patients with potential for swallowing or feeding disorders must be appropriately assessed, referred for diagnostic evaluation (as necessary), treated, managed, monitored, and followed throughout the continuum of care.

#### 4. ACTION

- a. <u>Chief Consultant, Rehabilitation Services.</u> Chief Consultant for Rehabilitation Services is responsible for:
- (1) Ensuring that evidence-based clinical practice guidelines are developed and communicated and implemented as required by this Directive.
  - (2) Ensuring that the content of this Directive is communicated to rehabilitation staff.
- (3) Taking those steps necessary to educate speech-language pathologists on clinical indicators for bedside and instrumental exams, follow-up and treatment, monitoring appropriateness of long-standing diet modification orders, and effective use of assistive feeding devices.
- b. <u>Chief Nursing Officer</u>. Chief Nursing Officer is responsible for communicating the content of this Directive to all Chief Nurse Executives, and ensuring that:
- (1) Effective communication exists between physicians and nurses, pharmacists, speech-language pathologists, dietitians, and other health care practitioners involved in the management of patients and residents with swallowing or feeding problems.
- (2) Nurses assess and document oral care. Forms or flow charts used to document activities of daily living (ADL) must be amended to indicate the patients' capability to self-provide oral care; and the nurses' role in providing oral hygiene.

- (3) Nurses assess and document percentage of meal consumed.
- (4) Discharge instructions include diet restrictions.
- (5) Best practices for conducting nursing assessments, and any unresolved issues are identified and reported back to the Chief Nursing Officer.
- c. <u>Director, Nutrition and Food Services.</u> The Director, Nutrition and Food Services is responsible for communicating the contents of this Directive to all Chiefs, Nutrition and Food Services and Program Managers and ensuring that:
- (1) There will be no more than 14 hours between a substantial evening meal and breakfast the following day. When a supplemental feeding is offered at bedtime, up to 16 hours may elapse between a substantial evening meal and breakfast the following day.
  - (2) Pre-thickened liquids are available for inpatients.
- (3) Guidelines are developed for educating patients using a consistent standard of care on thickening agent products for outpatients. *NOTE:* Guidelines are available on the NFS website at http://vaww.va.gov/nfs/clinical/visn12manual/dysphagiaguide.doc
  - (4) Standardized diets and terminology are used.
- (5) There is coordination with the Chief Consultant, Pharmacy Benefits Management to develop a list of thickening agent products for formulary consideration for outpatients.
- d. <u>Chief Consultant, Pharmacy Benefits Management.</u> Chief Consultant, Pharmacy Benefits Management (PBM) is responsible for:
- (1) Developing and updating guidelines, in coordination with the Director of Nutrition and Food Services, and the Chief Consultant, Rehabilitation Services, to support pharmacists in assessing the medication regimen in patients with swallowing disorders. **NOTE:** Refer to "Guidelines for Medication Review in Dysphagic Conditions" available on PBM's intranet website under Guidance for Clinicians at <a href="http://vaww.pbm.va.gov/pbm/guidelinicians.htm">http://vaww.pbm.va.gov/pbm/guidelinicians.htm</a>
- (2) Ensuring that thickening agents are added to the formulary following development of a list of agents by Nutrition and Food Services.
- e. <u>Chief of Staff (COS)</u>. Each COS is responsible for developing and implementing a comprehensive dysphagia and feeding management program, meeting the requirements defined in this Directive, no later than December 31, 2006. The COS, or designee, is responsible for:
- (1) Ensuring that an effective inter-disciplinary collaboration exists at the facility to assess, evaluate, coordinate, treat, manage, and follow-up patients with swallowing or feeding disorders.

**NOTE:** The Medical Center Director or designee may exercise local discretion in establishing a formal inter-disciplinary dysphagia team and team leader. These disciplines include, but are not limited to physicians, nurses, pharmacists, dentists and dental hygienists, nurse practitioners, physician assistants, speech-language pathologists, dietitians, occupational therapists, social workers, psychologists, pharmacists, and volunteer feeding assistants.

- (2) Ensuring availability of speech-language pathologists to evaluate, treat, manage, and follow-up patients with swallowing disorders. Speech-language pathologists will be available for consultation with physicians, nurses, pharmacists, dentists and dental hygienists, dietitians, and other health care practitioners in order to minimize complications of swallowing disorders such as malnutrition and aspiration pneumonia. *NOTE:* Availability means that physicians, nurses, and other health care practitioners will be able to consult with speech-language pathologists in a timely manner. Speech-language pathologists can be contacted or alerted by telephone, email, or pager. Speech-language pathologists may consult by means of telehealth technology, when appropriate. There is no requirement under this Directive that speech-language pathologists be on call.
- (3) Ensuring a process is in place to monitor clinical outcomes for ongoing performance improvement activities, with regard to swallowing or feeding disorders.

### f. **Physician.** The physician is responsible for:

- (1) Referring any patient identified with swallowing problems during the initial nursing assessment, or at any time during hospitalization or stay, for clinical examination or instrumental swallowing evaluation by a speech-language pathologist within 72 hours. Until this examination is completed, physicians will use clinical judgment to order nothing by mouth (NPO), with specific instructions for nutrition and medication by non-oral means (e.g. nasogastric tube); or, order that the patient be placed on a modified diet to enhance safety.
- (2) Entering an appropriate clinical warning in the Computerized Patient Record System (CPRS) regarding swallowing or feeding risks, when indicated.
- (3) Referring any patient identified with swallowing disorders for medication regimen review by the pharmacists, to assess the most appropriate medication dosage forms, given the patient's disorder.

### g. **Chief Nurse Executive.** The Chief Nurse Executive is responsible for:

- (1) Ensuring that all patients admitted to the facility receive an initial nursing assessment which includes an evaluation for swallowing and feeding problems. The assessment must include oral hygiene status, swallowing status, and feeding status.
- (a) Nurses must administer the initial assessment within 24 hours after admission. *NOTE:* Nursing assessment does not preclude identification of feeding or swallowing problems during a history and physical or initiation of a referral to a speech-language pathologist.

- (b) Nurses must document swallowing or feeding problems in the medical record.
- (c) Nurses must immediately notify the physician responsible for the care of the patient that a swallowing or feeding problem has been identified during initial assessment or at any time during the hospital stay.
- (d) Nurses must immediately initiate the referral (consultation) process to a speech-language pathologist for clinical examination and swallowing evaluation for those patients identified as meeting criteria for referral.
- (2) Consulting with the Chief, Dental Service, when indicated, on matters of nursing staff competency in assessment, support, provision, and documentation of daily oral hygiene.
- (3) Ensuring that effective communication exists between nurses and physicians, speech-language pathologists, dietitians, and other health care practitioners involved in the management of the patients with swallowing and feeding problems.
- (4) Ensuring that nurses assess and document oral care. Forms or flow charts used to document ADLs must be amended as needed to indicate the patient's capability to self-provide oral care, and the nurse's role in ensuring oral hygiene.
  - (5) Ensuring that nurses assess and document the percentage of meals consumed.
  - (6) Ensuring that discharge instructions include diet restrictions, as appropriate.
- (7) Ensuring that best practices for conducting nursing assessments and any unresolved issues are identified and reported to the Chief Nursing Officer.
- (8) Ensuring that supervision of meals and timely feeding assistance to patients for both meals and supplemental feedings is provided when needed.
- h. <u>Chief, Audiology and Speech Pathology.</u> Chief, Audiology and Speech Pathology, or designated organizational unit, is responsible for ensuring that the content of this Directive is communicated to the speech-language pathology staff, and ensuring that:
- (1) Speech-language pathologists appropriately document swallowing and feeding problems in CPRS.
- (2) Speech-language pathologists post feeding guidelines (feeding restrictions) at the bedside consistent with Joint Commission Accreditation of Healthcare Organizations (JCAHO) and patient privacy guidelines.
- (3) Speech-language pathologists follow national guidelines on clinical indications for clinical (bedside) and VFSS or other instrumental swallowing studies as required by this

Directive. **NOTE:** Clinical indications for bedside and instrumented swallowing examinations are located at: <a href="http://vaww1.va.gov/audiospeech/">http://vaww1.va.gov/audiospeech/</a>

- (4) Speech-language pathologists follow-up on swallowing consult recommendations with appropriate treatment and management.
- (a) When a swallowing or feeding problem has been identified, either by clinical or instrumental examination, the speech-language pathologist, in consultation with the attending physician, designated physician, or other health care practitioner, develop an appropriate, customized, patient and family-centered plan of care (treatment plan).
- (b) The plan of care contains, at a minimum, the diagnosis, functional goals, measurable treatment objectives, and the type, amount, duration, and frequency of treatment services.

  \*NOTE: Treatment guidelines are located at: <a href="http://vawwl.va.gov/audiospeech/">http://vawwl.va.gov/audiospeech/</a>
- (5) Speech-language pathologists follow-up on the appropriateness of long-standing diet consistency modification orders, and in collaboration with physicians, nurses, and dietitians, monitor the effectiveness and appropriateness of diet consistency modification orders, regardless of setting.
- (6) Speech-language pathologists are aware of, and thoroughly trained in, their role in the management of patients and residents with swallowing or feeding problems.
- i. <u>Chief, Nutrition Food Services, Program Managers, and Integrated Food Service</u> <u>Managers.</u> The Chief, Nutrition Food Services, Program Managers, and Integrated Food Service Managers are responsible for:
  - (1) Ensuring that assistive feeding devices are cleaned properly.
  - (2) Ensuring that nutrition and food services staff comply with meal and snack times.
  - (3) Ensuring that pre-thickened liquids are available for inpatients and residents.
  - (4) Ensuring that dietitians adopt and follow standardized diets and diet terminology.
- (5) Ensuring dietitians provide standardized diet terminology training to nurses, physicians, and other providers.
  - (6) Ensuring dietitians use standardized patient and resident education materials for diets.
  - (7) Ensuring dietitians use standardized outpatient education materials for thickening agents.
  - (8) Ensuring that dietitians consult directly with speech-language pathologists.

- (9) Coordinating with pharmacy on the list of thickening agent products available for outpatients.
- (10) Coordinating and collaborating with Audiology and Speech Pathology, and Nursing on the monitoring of long standing diet modification orders.
- **j**. <u>Chief, Pharmacy Service.</u> Chief, Pharmacy Service is responsible for ensuring that the content of this Directive is communicated to the pharmacy staff and ensuring:
- (1) That pharmacy staff is aware of, and thoroughly trained in, its role in the management of patients and residents with swallowing or feeding problems. **NOTE:** Refer to "Guidelines for Medication Review in Dysphagic Conditions" available on PBM's intranet website under Guidance for Clinicians at <a href="http://vaww.pbm.va.gov/pbm/guidelinicians.htm">http://vaww.pbm.va.gov/pbm/guidelinicians.htm</a>
  - (2) The availability and distribution of thickening agents for outpatients.
  - k. Chief, Dental Service. The Chief Dental Service is responsible for:
- (1) Providing advice and assistance to Nursing Service regarding the competencies and skills required for the assessment of oral hygiene capability.
- (2) Providing advice and assistance to Nursing Service regarding attaining and maintaining competency in the support and provision of oral hygiene for dependent patients.

#### 5. REFERENCES

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- j. Stroke Rehabilitation. Clinical practice Guideline. Office of Quality and Performance. Department of Veterans Affairs. http://www.oqp.med.va.gov/cpg/STR/STR\_base.htm.
- k. Dysphagia Diet Guidelines. http://vaww.va.gov/nfs/clinical/visn12manual/dysphagiaguide.doc
- **6. FOLLOW-UP RESPONSIBILITIES:** The Office of Patient Care Services (11) in collaboration with the Office of Nursing Services (108) is responsible for the content of this VHA Directive. Questions relating to this Directive may be referred to the National Audiology and Speech Pathology Service at (202) 745-8578.
- **7. RESCISSIONS:** None. This VHA Directive expires on May 31, 2011.

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FLD: VISN, MA, DO, OC, OCRO, and 200 – E-mailed 5/22/06