

**MANAGEMENT OF PATIENTS WITH SWALLOWING (OROPHARYNGEAL
DYSPHAGIA) AND FEEDING DISORDERS**

- 1. REASON FOR ISSUE:** This Veterans Health Administration (VHA) directive defines the policy and procedures for the interdisciplinary management of patients with swallowing (i.e., oropharyngeal dysphagia) or feeding disorders.
- 2. SUMMARY OF MAJOR CHANGES:** Changes have been made to reflect the current organizational structure in VA Central Office and updates in best practices related to early identification, comprehensive clinical and instrumental evaluation, treatment planning, and follow-up of patients with swallowing (oropharyngeal dysphagia) or feeding disorders.
- 3. RELATED ISSUES:** VHA Directive 2011-038, VHA Handbook 1109.02, VHA Handbook 1109.05, VHA Handbook 1101.07, VHA Handbook 1011.06, VHA Handbook 1142.01, VHA Handbook 1170.04.
- 4. RESPONSIBLE OFFICE:** The Deputy Chief Patient Care Services Office for Rehabilitation and Prosthetics Services (10P4R) is responsible for the content of this directive. Refer questions to 202-461-7444.
- 5. RESCISSIONS:** VHA Directive 2006-032, dated May 17, 2006, is rescinded.
- 6. RECERTIFICATION:** This VHA directive is scheduled for recertification on or before the last working day of April 2022. This VHA directive will continue to serve as national policy until it is recertified or rescinded.

Poonam Alaigh, M.D.
Acting Under Secretary for Health

DISTRIBUTION: Emailed to the VHA Publications Distribution List on April 21, 2017.

CONTENTS

**MANAGEMENT OF PATIENTS WITH SWALLOWING (OROPHARYNGEAL
DYSPHAGIA) AND FEEDING DISORDERS**

1. PURPOSE.....	1
2. BACKGROUND.....	1
3. DEFINITIONS.....	3
4. POLICY	6
5. RESPONSIBILITIES.....	6
6. REFERENCES:.....	14
APPENDIX A	
SYMPTOMS AND SIGNS OF SWALLOWING (OROPHARYNGEAL DYSPHAGIA) AND FEEDING PROBLEMS.....	A-1
APPENDIX B	
EARLY IDENTIFICATION AND REFERRAL FOR SWALLOWING (OROPHARYNGEAL DYSPHAGIA) PROBLEMS.....	B-1

MANAGEMENT OF PATIENTS WITH SWALLOWING (OROPHARYNGEAL DYSPHAGIA) AND FEEDING DISORDERS

1. PURPOSE

This Veterans Health Administration (VHA) directive defines the policy and procedures for the early identification, comprehensive clinical and instrumental evaluation, treatment planning, and follow-up of patients with swallowing (oropharyngeal dysphagia) or feeding disorders. **AUTHORITY:** 38 U.S.C. 7301(b).

2. BACKGROUND

a. Swallowing is an extremely complex and integrated neuromuscular process that synchronizes volitional and automatic movements through the mouth and pharynx and into the esophagus, to provide nutrition and hydration. Swallowing is often divided into two stages, oropharyngeal and esophageal. Oropharyngeal dysphagia refers to difficulty preparing or transferring food or liquid from the oropharynx into the esophagus and results from abnormal function proximal to the esophagus. Complications of oropharyngeal dysphagia include malnutrition, dehydration, aspiration, pneumonia or upper respiratory infections, hospital readmissions, and reduced quality of life.

b. Approximately 10 million individuals in the United States are evaluated each year for swallowing difficulties, and it has been estimated that the prevalence of dysphagia may be as high as 22 percent in adults over the age of 50. The findings from the American Speech-Language Hearing Association (ASHA) National Outcomes Measurement System (NOMS) indicate that swallowing is the most commonly treated disorder for individuals with neurogenic diagnoses, with 47 percent of patients in a healthcare setting receiving treatment for dysphagia. In 2014, the speech-language pathologists working in the VA completed more than 92,630 procedures focused on the evaluation of oropharyngeal dysphagia highlighting the incidence of suspected dysphagia in the Veteran population.

c. Oropharyngeal dysphagia is often the symptom or co-morbid progressive symptom of an underlying disease or disorder and may be due to two broad etiologic categories: neurogenic and structural. Neurogenic etiologies include stroke, head trauma, Parkinson's disease and parkinsonism, progressive supranuclear palsy, amyotrophic lateral sclerosis, multiple sclerosis, myasthenia gravis, and a variety of muscular diseases and dementias. The importance of early identification and management of dysphagia for individuals with an acute or progressive neurological etiology has been highlighted in several VHA guidelines, handbooks and directives, including: VA/DoD Clinical Practice Guideline for the Management of Stroke Rehabilitation (2010); VHA Directive 2011-038, or subsequent policy issue; Treatment of Acute Ischemic Stroke (November 2011); VHA Handbook 1101.07, Amyotrophic Lateral Sclerosis (ALS) System of Care Procedures (July 2014); and VHA Handbook 1011.06, Multiple Sclerosis System of Care Procedures, (December 2009).

d. Dysphagia may also be secondary to structural problems including tumors of the head and neck, cleft lip or palate, uvulectomy, cervical spine surgeries and abnormalities, Zenker's diverticulum, cricopharyngeal bar, or esophageal web. Oropharyngeal dysphagia may develop as a primary effect of a head and neck cancer or as a result of surgical resection or reconstruction, and may occur long after organ preservation treatments (radiation and chemotherapy) have been completed. Oropharyngeal dysphagia has been reported in individuals greater than 5 years following organ preservation therapies for head and neck cancer, and with as high as 85 percent developing a pneumonia requiring hospitalization. It has been reported that 97 percent of partial or total laryngectomy patients experience dysphagia at discharge from a medical center, with less than 53 percent returning to a normal diet at 3 years post discharge. Reports after anterior cervical spine (C4-5 and C5-6) surgery have indicated that more than 10 percent of the patients developed dysphagia.

e. Oropharyngeal dysphagia has been reported in all patient care settings including the emergency room, acute intensive care, nursing homes, palliative care, and outpatient clinics. In the general intensive care population, endotracheal intubation lasting longer than 24 hours has been shown to substantially increase the risk of dysphagia, with a reported prevalence of 34 – 62 percent of patients experiencing dysphagia. Dysphagia was diagnosed in 51 percent of patients following prolonged (48 hours) endotracheal intubation after cardiac surgery which delayed return to normal oral feeding and subsequent hospital discharge. Further, the incidence of dysphagia in older adults with or without dementia residing in long-term care facilities ranges from 40 - 60 percent. VHA Handbook 1142.01, Criteria and Standards for VA Community Living Centers (CLC) (April 2008) emphasizes the importance of safe eating including nutrition, hydration, and compensatory strategies for patients with swallowing and feeding disorders.

f. 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 (i.e., dry mouth syndrome), untreated dental decay, periodontal and gingival disease, and feeding dependency are at elevated risk for aspiration-related pneumonia.

g. Swallowing and feeding disorders rarely occur in isolation and are part of a broader spectrum of disabilities that are most effectively managed via a multidisciplinary or interdisciplinary approach. A dysphagia team may be pre-established within a medical setting or established as needed and determined by the medical center or patient needs. For example, a core dysphagia team should include: a speech-language pathologist, nursing staff members and assistants, dietitian nutritionist, pharmacist, and medical providers including physician specialists working in tandem with the patient and family; or, an existing team such as a head and neck cancer team that may include an otolaryngologist, radiologist, oncologist, oncology nurse, dentist and prosthodontist,

dental hygienist, speech-language pathologist, dietitian nutritionist, and social worker when developing a comprehensive care plan for the management of dysphagia.

3. DEFINITIONS

a. **Aspiration.** Aspiration indicates the entry of secretions, food/liquid, or any foreign material into the airway below the level of the true vocal cords. Aspiration may occur before the pharyngeal phase of the swallow is initiated, during the swallow as food or liquid passes through the laryngeal vestibule, or after the swallow secondary to food or liquid residue. Aspiration may also occur from backflow of material from the esophagus or reflux from the stomach. **NOTE:** *Silent aspiration refers to the entry of material that below the level of the vocal cords, with no overt symptom such as throat clearing or cough, and material remains in the airway.*

b. **Assessment.** Identification of symptoms and signs for dysphagia by front line medical providers and nurses based upon their familiarity with common medical diagnostic categories known to present with co-existing dysphagia. A list of common patient symptoms, and common signs of dysphagia such as dysarthria (slurred speech) and cough during a meal are attached in Appendix A, Symptoms and Signs of Swallowing (Oropharyngeal Dysphagia) and Feeding Problems. Appendix B, Early Identification and Referral for Swallowing (Oropharyngeal Dysphagia) provides a list of medical problems and clinical consensus or best practices for the early identification of swallowing problems. Once the initial risk factors and signs of dysphagia are identified, the medical provider or nurse will make a referral to a speech-language pathologist for a comprehensive clinical evaluation of swallow function.

c. **Assistive Device.** An assistive device for swallowing may be recommended to regulate the volume, speed, or placement of a food or liquid bolus into the oropharynx (e.g., adaptive cups, straws, or glossectomy spoons). An assistive device for feeding (e.g., rocker knife, weighted spoon, or plate guard) may be recommended for patients that have difficulty manipulating food on the plate or transferring food from the dish to the mouth. Speech-language pathologists prescribe assistive devices for swallowing based upon the results of a comprehensive dysphagia evaluation, and consult with occupational therapists to assess the feeding skills and prescribe assistive devices for feeding.

d. **Clinical Evaluation of Swallowing.** A clinical evaluation of swallowing is sometimes referred to as a clinical/bedside dysphagia evaluation. This comprehensive clinical evaluation is completed by a speech-language pathologist and consists of: a case history and review of medical records; oral or non-oral intake; observation of auditory, visual, motor and cognitive-communication status; physical assessment of the oral structures for swallowing; assessment of speech and voice quality; and functional assessment of swallowing ability and self-feeding. Judgements are made regarding the adequacy of airway protection and coordination of respiration and swallowing. The speech-language pathologist may also evaluate the effect of alterations in rate or timing of the bolus delivery or use of therapeutic postures and swallowing maneuvers as indicated. Tools and techniques such as cervical auscultation and pulse oximetry, or functional rating scales may be administered to provide additional objective data and

assist in documenting the perceived severity of swallowing problems, change in status with dysphagia management, and quality of life.

e. **Dysphagia.** Dysphagia is a swallowing disorder. The signs and symptoms may involve the mouth, pharynx, larynx, or esophagus, and may occur at different phases in the swallowing process. Disorders of swallowing are categorized according to the swallowing phase affected. **NOTE:** *Unless otherwise noted, the term dysphagia in this directive refers to the oropharyngeal phases of the swallow, specifically the oral or pharyngeal phase of the swallow.*

(1) **Oral Phase.** The oral phase of the swallow refers to the oral preparatory phase (often referred to as voluntary mastication and preparation of food into a bolus), and the oral propulsive phase (voluntary movement of the bolus from the oral cavity to the tonsillar pillars). Oral phase disorders usually result from: impaired control of the tongue; reduced mandibular movement; poor dentition; difficulty chewing solid food; and initiating swallows. When eating or drinking liquids, patients may find it difficult to contain and manage liquids or foods in the oral cavity before swallowing. As a result, liquids and foods may spill prematurely into the pharynx, possibly resulting in aspiration and/or choking.

(2) **Pharyngeal Phase.** The pharyngeal phase of the swallow refers to the passage of a bolus from the oral cavity into the upper esophagus. There are several events that occur during the pharyngeal phase of the swallow that include tongue base retraction, velopharyngeal closure, pharyngeal constriction, airway closure, and opening of the upper esophageal sphincter. When pharyngeal clearance is impaired, a patient may be unable to ingest sufficient amounts of food and drink for adequate nutrition and hydration. 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.

(3) **Esophageal Phase.** The esophageal phase of the swallow refers to the reflexive passage of bolus from the level of the cricopharyngeal sphincter, past the lower esophageal sphincter and into the stomach. Impaired esophageal function may result in retention of food and liquid in the esophagus after swallowing due to mechanical obstruction, motility disorder, or impaired opening of the lower esophageal sphincter.

f. **Feeding.** The placement of food/liquids into the mouth for the purpose of ingestion. In self-feeding, voluntary arm and hand coordination is required to bring food from plate to mouth. A feeding disorder refers to the disordered placement of food in the mouth and difficulty in food manipulation prior to initiation of the swallow. Individuals with feeding disorders may need partial, moderate or total feeding assistance during oral intake.

g. **Functional Swallow.** A swallow that may be abnormal or altered, but does not result in aspiration or reduced swallow efficiency. This type of swallow does ensure maintenance of adequate nutrition and hydration.

h. **Instrumental Dysphagia Evaluation.** An instrumental evaluation may utilize fluoroscopy, endoscopy, manometry, and ultrasound technology to visualize the structures and/ or define the physiology of the swallow along with confirming that compensatory swallow strategies or maneuvers are appropriate for safe and efficient oral nutrition and hydration. A single instrumental procedure may be selected to provide a comprehensive view of the patient during oral intake, or may be combined with a variety of procedures to provide information regarding a specific structure or aspect of the swallow process.

(1) **Fluoroscopic Examination of Swallow Function.** The most widely recognized radiographic study recommended to assess the oral, pharyngeal and esophageal phases of the swallow utilizes fluoroscopy. It is conducted by a speech-language pathologist in coordination with a radiologist. The fluoroscopic examination is often referred to as a modified barium swallow (MBS) study and is designed to observe the oral and pharyngeal phases of the swallow during oral intake and determine the presence, severity, and timing of aspiration and during the exam. If an abnormal swallow pattern is observed, the speech-language pathologist may introduce strategies to evaluate the effect of head, neck or trunk postures, swallow maneuvers, food or liquid modifications and viscosities, and sensory enhancements to determine the patients capacity for partial or total oral intake or if non-oral feedings may be warranted. ***NOTE: The standard level of practice for fluoroscopic exam of swallow function requires that both the speech-language pathologist and the radiologist be present and follow VA fluoroscopy safety guidance.***

(2) **Endoscopic Assessment of Swallowing Function.** A fiberoptic endoscope is passed transnasally to examine the specific aspects of the swallowing mechanism at the velopharynx, oropharynx, pharynx and larynx. The procedure is often referred to as Fiberoptic Endoscopic Examination of Swallow Safety (FEES) and is completed by speech-language pathologists to assess swallowing function and structures within the upper aerodigestive tract, to observe secretion management or may be utilized as a biofeedback tool during the course of treatment.

(3) **Other instrumental studies may include:**

(a) **Esophagram:** A fluoroscopic assessment of the esophageal phase of the swallow conducted by a radiologist;

(b) **Esophagogastroduodenoscopy (EGD):** A procedure to examine the lining of the esophagus, stomach and first part of the small intestine conducted by a specialist in gastroenterology;

(c) **Pharyngeal Manometry or Manofluorography:** An instrumental procedure to measure pressure generation patterns during the swallow in the pharynx and upper esophageal sphincter. Manofluorography refers to concurrent manometric and videofluoroscopic imaging of oropharyngeal swallowing;

(d) **Scintigraphy:** An instrumental nuclear medicine procedure to assess aspiration, reflux, and gastric emptying (usually as a percentage of radioactive contents left in the

stomach after 1 hour). Images produced by gamma camera record the emissions of radionuclide energy from the individual being examined; and

(e) Ultrasonography: An instrumental procedure involving transducers using high-frequency sound waves to create images allowing for observation of movement of structures for swallowing.

i. Management of Dysphagia. Management of dysphagia refers to the planning and coordination of interdisciplinary health care services involved in early identification, evaluation, treatment, monitoring, education and counseling, and discharge planning. Management often refers to an intervention that is chronic, intractable, or has an undetermined prognosis, placing the burden for safe nutrition and hydration on the family, caregiver and nursing staff members. Strategies that change behavior (i.e., posture of the head or neck), or bolus characteristics (i.e., volume, viscosity) to achieve functional swallowing may be referred to as compensatory and are not intended to change physiology. Treatment, remediation, or therapy implies that intervention is offered to patients who demonstrate on examination that they are capable of modifying impaired functions, and includes exercises and movements designed to change swallowing physiology. Treatment and management may overlap or be intermittently introduced as the patient condition changes. The diagnosis of dysphagia does not automatically indicate that the individual is a candidate for dysphagia treatment or management, and enteral tube feeding (nasogastric or gastric tube feeding) may be introduced for patients that are unable to consume enough nutrition or hydration by oral intake. When a patient has a progressive or terminal disease, the team may need to assist in developing a care plan designed to provide nutrition and hydration for pleasure or comfort care rather than attempting a curative approach. Consideration of the individual patient wishes for management of dysphagia is paramount and should be the focus of the plan.

j. Oral Intake. Oral intake refers to placement of food in the mouth; oral and lingual actions used to prepare food for the swallow and 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.

k. Team. Team refers to multidisciplinary, interdisciplinary, or transdisciplinary collaboration of various health care practitioners and specialists with responsibility for the assessment, evaluation, treatment, management, and follow-up of complex patients with swallowing or feeding disorders.

4. POLICY

It is VHA policy that all patients with potential for swallowing or feeding disorders be appropriately assessed, referred as necessary for diagnostic evaluation, treated, managed, monitored, and followed throughout the continuum of care.

5. RESPONSIBILITIES

a. **Deputy Chief Patient Care Services Officer for Rehabilitation and Prosthetic Services or Designee.** The Deputy Chief Patient Care Services Officer for Rehabilitation and Prosthetic Services or Designee is responsible for but not limited to:

(1) Ensuring that the content of this directive is communicated to all Rehabilitation and Prosthetic staff;

(2) Ensuring that the evidence-based practice guidelines addressing oropharyngeal dysphagia and feeding problems are reviewed and updated every 2years, or sooner as warranted;

(3) Ensuring there is continued communication with VA Central Office Programs that are impacted by this directive to ensure collaboration and best practices in the management of Veterans with swallowing and feeding disorders. Those programs include, but are not limited to Office of Nursing Services, Nutrition and Food Services, Diagnostic Services, Pharmacy Benefits Management, Dental Service, and Geriatrics and Extended Care; and

(4) Taking steps necessary to facilitate training for speech-language pathologists and interdisciplinary dysphagia team members regarding best practice for the management of swallowing and related disorders.

b. **Chief Nursing Officer.** The Chief Nursing Officer is responsible for but not limited to communicating the content of this directive to all Chief Nurse Executives.

c. **National Director, Nutrition and Food Services.** The National Director, Nutrition and Food Services is responsible for but not limited to:

(1) Communicating the contents of this directive to all Chiefs or Program Managers, Nutrition and Food Services and Veterans Canteen Service Integrated Sites;

(2) Ensuring standardized patient education materials are developed and available for use regarding the provision of standardized diets and thickened liquids. Refer to <http://vaww.nutrition.va.gov/clinicalNutrition> under the heading "Dysphagia" for materials; **NOTE:** *This is an internal VA Web site not available to the public.*

(3) Requiring standardized diets and diet terminology are used. Refer to VHA Nutrition and Food Services policies for details.

(4) Ongoing coordination with the Chief Consultant, Pharmacy Benefits Management to ensure a thickening agent product is available and provided for outpatients.

d. **Chief Consultant, Pharmacy Benefits Management.** The Chief Consultant, Pharmacy Benefits Management is responsible for but not limited to:

(1) Reviewing and updating guidelines, in coordination with the Director of Nutrition and Food Services, and the Deputy Chief Patient Care Services Officer for

Rehabilitation and Prosthetic Services to support clinicians in assessing the medication regimen in patients with swallowing disorders; and

(2) Ensuring that thickening agents (powdered or gel) are available for patients at the time of discharge from an inpatient unit.

e. **Chief of Staff (COS)**. Each COS or designee is responsible for maintaining a comprehensive swallowing and feeding management program and is responsible for but not limited to:

(1) Ensuring that an effective interdisciplinary collaboration exists at the VA medical facility to assess, evaluate, coordinate, treat, manage, and follow-up with patients with swallowing or feeding disorders. **NOTE:** *The VA Medical Facility Director or designee is responsible for establishing an interdisciplinary dysphagia team and appointing a team leader. These disciplines include, but are not limited to: speech-language pathologists, dietitian nutritionists, physicians and specialists including otolaryngologists, neurologists, gastroenterologists and radiologists, nurses, clinical pharmacists, dentists and dental hygienists, nurse practitioners, physician assistants, occupational therapists, social workers, psychologists, and volunteer feeding assistants;*

(2) Guarantee availability of speech-language pathologists to evaluate, treat, manage, and follow-up with patients with swallowing disorders. Speech-language pathologists will be available for consultation with physicians, nurses, clinical pharmacists, dentists and dental hygienists, dietitians, and other health care practitioners in order to minimize complications of swallowing or feeding 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 (within 24 – 48 hours). 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 effective communication between nurses and physicians, speech-language pathologists, dietitians, and other health care practitioners involved in the management of the patients with swallowing or feeding problems; and

(4) Ensuring a process is in place to monitor clinical outcomes for ongoing performance improvement activities, with regard to swallowing or feeding disorders.

f. **Medical Provider**. The medical provider can be a physician, nurse practitioner, or physician assistant. The medical provider is responsible for but not limited to:

(1) During an assessment observe patients for symptoms or signs of dysphagia. A list of common patient symptoms are attached in Appendix A, Symptoms and Signs of Swallowing (Oropharyngeal Dysphagia) and Feeding Problems. Appendix B, Early Identification and Referral for Swallowing (Oropharyngeal Dysphagia) provides a list of medical problems and clinical consensus or best practices for the early identification of swallowing problems.

(2) The referral (consultation) of patients identified with signs or symptoms of swallowing or feeding problems to a speech-language pathologist for a clinical evaluation of swallowing. Until this examination is completed, the medical providers will use clinical judgment to order Nil per os (NPO; i.e., nothing by mouth), with specific instructions for nutrition and medication by non-oral means (e.g. nasogastric tube); or, recommend the patient be placed on a modified diet to enhance safety;

(3) Documenting and ordering appropriate diet, supplement, prescriptions, and nursing instructions for in-patients once the evaluation by the speech-language pathologist is complete;

(4) Ensuring diet, prescriptions and feeding instructions are included in discharge instructions upon transfer or discharge from inpatient status;

(5) Entering an appropriate clinical warning in the Computerized Patient Record System (CPRS) regarding swallowing or feeding risks, when indicated;

(6) Referring any patient identified with swallowing disorders for medication regimen review by the clinical pharmacists, to assess the most appropriate medication dosage and forms, given the patient's disorder; and

(7) Coordinating and collaborating with speech-language pathologists and staff members in Nutrition and Food Service, Nursing, and Pharmacy, on the monitoring of long standing diet modification recommendations or orders.

g. **Chief Nurse Executive.** The Chief Nurse Executive is responsible for but not limited to:

(1) Ensuring that all patients admitted to a VA medical facility including a CLC receive an initial nursing admission assessment using the national patient assessment template where available. This template includes questions to document common signs and symptoms associated with swallowing or feeding disorders problems (Appendix A and B);

a. Making certain nurses administer the initial nursing admission assessment within 24 hours after patient admission. **NOTE:** *Nursing assessment does not preclude identification of signs or symptoms of swallowing or feeding during a history and physical or initiation of a referral to a speech-language pathologist;*

b. Affirming nurses document patient symptoms or signs of difficulty swallowing or feeding in the medical record;

c. Ensuring nurses notify the medical provider 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; and

d. Confirming nurses initiate the referral (consultation) process to a speech-language pathologist for clinical evaluation of swallowing for those patients identified as meeting criteria for referral.

(2) Consulting with the Chief, Dental Service, when indicated, on matters of nursing staff members competency in assessment, support, provision, and documentation of daily oral hygiene;

(3) Ensuring that nurses assess and document the percentage of meals consumed by the patient; and

(4) Ensuring that supervision of meals and timely feeding assistance to patients for meals and supplemental feedings is provided when needed.

h. **Chief, Audiology and Speech Pathology.** The Chief, Audiology and Speech Pathology, or designee, is responsible for, but not limited to:

(1) Ensuring that the content of this directive is communicated to speech-language pathology staff members and is monitored for compliance;

(2) Ensuring speech-language pathologists are aware of, and thoroughly trained in, their role in the management of patients and residents with swallowing or feeding problems. Speech-language pathologists follow national dysphagia guidelines located at:

<http://vaww.infoshare.va.gov/sites/rehab/asps/Speech%20Pathology/Forms/AllItems.aspx?RootFolder=%2Fsites%2Frehab%2Fasps%2FSpeech%20Pathology%2FDysphagia&FolderCTID=0x01200031516F0E39D891408AEE502126F385A5&View={1078A840-96FD-4215-B6F7-B96AE20A1C93}>. **NOTE:** *This is an internal VA Web site not available to the public;*

(3) Coordinating and collaborating with the Chief of Staff, Nursing Service, Food and Nutrition Service, Pharmacy, Radiology and other medical providers and specialists as warranted regarding the management of patients with swallowing and feeding disorders; and

(4) Assuring that speech-language pathologists are available to participate on interdisciplinary team(s) to assist with the early identification and management of swallowing disorders (oropharyngeal dysphagia) according to VHA Handbooks and Directives (see references).

i. **Speech-Language Pathologist.** The speech-language pathologist is responsible for but not limited to:

(1) Following VHA Guidelines including the Dysphagia Evaluation Guidelines, Dysphagia Treatment Guidelines, Guidelines for Monitoring Dietary Recommendations, Assistive Swallowing Device and Assistive Feeding Device Guidelines, and Guidelines for Posting Feeding and/or Swallowing Information located at:

<http://vaww.infoshare.va.gov/sites/rehab/asps/Speech%20Pathology/Forms/AllItems.aspx?RootFolder=%2Fsites%2Frehab%2Fasps%2FSpeech%20Pathology%2FDysphagia&FolderCTID=0x01200031516F0E39D891408AEE502126F385A5&View={1078A840-96FD-4215-B6F7-B96AE20A1C93}>. **NOTE:** *This is an internal VA Web site not available to the public;*

(2) Documenting the results of the comprehensive clinical and instrumental evaluation(s), diagnosis of dysphagia, prognosis for change, and any compensatory or rehabilitative strategies including but, not limited to:

(a) Cognitive-communication skills that will impact the management of oropharyngeal dysphagia, safest food and liquid for oral nutrition and supplements, and if warranted, partial or total non-oral enteral tube feeding (nasogastric, gastric or jejunal);

(b) Appropriate strategies for delivery of oral medication (cut, crushed, liquid, or mixed with foods);

(c) Compensatory eating/feeding strategies including modification of postures, environment, and recommendations for adaptive swallowing devices to control the volume and timing of the bolus into the mouth or during the swallow and appropriate swallowing maneuvers (i.e., Mendelsohn maneuver, effortful swallowing (hard swallow), supraglottic or super supraglottic swallowing); and/or

(d) Dysphagia rehabilitation including elements of exercise physiology including range of motion or resistance exercises.

NOTE: *The Dysphagia Outcome and Severity Scale (DOSS) is recommended to document swallow function and supervision required during a meal and is available at vaww.nutrition.va.gov/docs/ProgramGuidelinesforDet. A dysphagia template is available at:*

<http://vaww.infoshare.va.gov/sites/rehab/asps/Speech%20Pathology/Forms/AllItems.aspx?RootFolder=%2Fsites%2Frehab%2Fasps%2FSpeech%20Pathology%2FDysphagia%2FDocuments%2FVA%20Information>. **NOTE:** *This is an internal VA Web site not available to the public.*

(3) Adopting and following standardized diets and diet terminology. Refer to <http://vaww.nutrition.va.gov/clinicalNutrition> under the heading “Dysphagia” for materials; **NOTE:** *This is an internal VA Web site not available to the public.* **NOTE:** *This is an internal VA Web site not available to the public.* **NOTE:** *The speech-language pathologist may place diet orders under the medical provider’s name. This will signal the provider to concur with the order and its use;*

(4) Prescribing adaptive swallowing devices as warranted and collaborating with occupational therapy and Prosthetics Services regarding the assessment and prescription of adaptive feeding devices;

(5) Documenting plans for ongoing follow-up, monitoring, or reassessment to observe for changes in oral intake and appropriateness of any oral diet modifications or restrictions, changes with treatment/rehabilitation, reviewing use of compensatory strategies or maneuvers, and to assure continuity of care;

(6) Recommending referral to other specialists, and other considerations for additional tests;

(7) Training of patients, caregivers and staff members regarding compensatory swallowing or feeding strategies;

(8) Documenting dysphagia (oral, oral-pharyngeal, or pharyngeal dysphagia) in the electronic health record (CPRS) problem list if the swallowing problem is persistent and chronic or progressive in nature. Additional comments may be added to the problem list to denote any behavioral or feeding strategies;

(9) Developing a customized, patient and family-centered plan of care (treatment plan) in consultation with the attending or primary care medical providers, specialists, and interdisciplinary dysphagia team if a diagnosis of oropharyngeal dysphagia is made. 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 and recommendations for reassessment;

(10) Providing feeding guidelines at the bedside; consistent with Joint Commission Accreditation of Healthcare Organizations (JCAHO) and an instruction sheet for patients in the community;

(11) Collaborating with the medical team to determine the appropriate time and conditions for discharge from ongoing management of dysphagia. Ensuring that the dysphagia plan of care, food or liquid modifications, and compensatory feeding strategies are transmitted to the primary care team or admitting VA medical facility or CLC at the time of discharge;

(12) Communicating and consulting with the dietitian nutritionists regarding recommendations for optimal oral and/or enteral nutrition therapy (enteral tube);

(14) Collaborating with Pharmacy regarding the list of thickening agent products available for outpatients and review of medications that may impact swallow function. ***NOTE: The speech-language pathologist may act as an agent for the medical provider and may place outpatient pharmacy orders for thickening agents under the medical provider's name. This will signal the provider to concur with the order and its use; and***

(15) Communicating and consulting with nursing staff members regarding compensatory feeding strategies and monitoring of modified diet orders.

j. Chief or Program Manager Nutrition Food Service and Veterans Canteen Service Integrated Sites The Chief or Program Manager, Nutrition Food Services, Program Managers, and Veterans Canteen Service Integrated Food Service Managers are responsible for but not limited to:

(1) Ensuring that Clinical Nutrition Managers communicate the content of the directive to their dietitian nutritionists and ensure compliance. In the absence of a Clinical Nutrition Manager, the Chief is responsible for communicating directly with the dietitian nutritionists the content of the directive to ensure compliance;

(2) Ensuring that assistive feeding devices for inpatients and residents are provided, cleaned, and stored properly according to manufacturer specifications. Refer to adaptive feeding devices policy template at <http://vaww.nutrition.va.gov/NUTRITION/docs/clinical/AssistiveFeedingDevicesGuidelines--Revised.doc>. **NOTE:** *This is an internal VA Web site not available to the public;*

(3) Ensuring that nutrition and food services staff members comply with meal and snack times. Refer to VHA Nutrition and Food Service policies for details;

(4) Ensuring that pre-thickened liquids are available for inpatients and residents.

(5) Ensuring that dietitian nutritionists adopt and follow standardized diets and diet terminology. Refer to VHA Nutrition and Food Service policies for details.

(6) Ensuring dietitian nutritionists provide standardized diet terminology training to nurses, physicians, and other providers;

(7) Ensuring dietitian nutritionists use standardized patient and resident education materials for diets. Refer to <http://vaww.nutrition.va.gov/clinicalNutrition> for materials. **NOTE:** *This is an internal VA web site not available to the public;*

(8) Ensuring dietitian nutritionists use standardized outpatient education materials for thickening agents. Refer to <http://vaww.nutrition.va.gov/clinicalNutrition> for materials. **NOTE:** *This is an internal VA web site not available to the public;*

(9) Ensuring that dietitian nutritionists communicate and consult directly with speech-language pathologists;

(10) Coordinating with Pharmacy on the list of thickening agent products available for outpatients; and

(11) Coordinating and collaborating with staff members in Audiology and Speech Pathology, and Nursing on the monitoring of long standing diet modification orders.

k. **Clinical Dietitian Nutritionist.** The clinical dietitian nutritionist is responsible for but not limited to:

(1) Adopting and following standardized diets and diet terminology.

(2) Providing standardized diet terminology training to nurses, physicians, and other providers;

(3) Using standardized patient and resident education materials for diets. Refer to <http://vaww.nutrition.va.gov/clinicalNutrition> for materials. **NOTE:** *This is an internal VA web site not available to the public;*

(4) Communicating and consulting directly with speech-language pathologists.

l. **Chief, Pharmacy Service.** Chief, Pharmacy Service is responsible for but not limited to:

(1) Ensuring that the content of this directive is communicated to the clinical pharmacy staff members;

(2) Reviewing medications and identifying those with a high risk for impact upon level of alertness or oropharyngeal dysphagia;

(3) Ensuring inventory and availability for distribution of thickening (powered/starch or gel/gum based) agents for patients; and

(4) Provide guidance for medications that may be cut, crushed, or in liquid or transdermal or other alternative forms to accommodate the needs of patients with dysphagia.

m. **Chief, Dental Service.** The Chief Dental Service is responsible for but not limited to:

(1) Providing advice and assistance to Nursing Service regarding the competencies and skills required for the assessment of oral hygiene capability; and

(2) Providing advice and assistance to Nursing Service regarding attaining and maintaining competency in the support and provision of oral hygiene for dependent patients.

n. **Chief, Physical Medicine and Rehabilitation Service (PM&R).** The Chief PM&R is responsible for assuring that occupational therapists are available for consultation, and to provide evaluation and therapy for patients with known or suspected feeding problems.

o. **Chief, Prosthetic Service.** The Chief Prosthetic Service is responsible for filling prosthetic orders for adaptive swallowing or feeding devices as prescribed by the speech-language pathologist or occupational therapist.

6. REFERENCES:

a. VHA Nutrition and Food Services policies.

b. VHA Directive 2011-038, Treatment of Acute Ischemic Stroke, or subsequent policy issue.

c. VHA Handbook 1011.06, Multiple Sclerosis System of Care Procedures.

d. VHA Handbook 1101.07, Amyotrophic Lateral Sclerosis (ALS) System of Care Procedures.

e. VHA Handbook 1142.01, Criteria and Standards for VA Community Living Centers (CLC).

- f. VHA Fluoroscopy Safety policies.
- g. Academy of Nutrition and Dietetics “Nutrition Care Manual Diet Manual” for standardized diet guidance: www.nutritioncaremanual.org. **NOTE:** *This is website is outside VA control and may not conform to Section 508 of the Rehabilitation Act of 1973.*
- h. Adams, HP, et al. (2007). Guidelines for the early management of adults with ischemic stroke: A guideline from AHA/ASA. *Stroke*, 38:1655-1711.
- i. American Speech-Language-Hearing Association. (2000). Clinical indicators for instrumental assessment of dysphagia (guidelines). *ASHA Desk Reference*, 3, 225–233.
- j. American Speech-Language-Hearing Association. (2004). Guidelines for Speech-language pathologists performing video fluoroscopic swallowing studies. *ASHA Supplement 24*, pp. 77–92.
- k. American Speech-Language-Hearing Association. (2002, April 16). Roles of speech-language pathologists in swallowing and feeding disorders: Position statement. *ASHA Leader*, vol. 7 (Supplement 22), 73.
- l. American-Speech-Language-Hearing Association. (1999). Roles of Speech-Language Pathologists and Otolaryngeologist in the Performance and Interpretation of Endoscopic Examinations of Swallowing.
- m. American Speech-Language-Hearing Association. (1992). Instrumental Diagnostic Procedures for Swallowing. *ASHA*, 34 (March, Suppl. 7), 25-33.
- n. Evidence Report/Technology Assessment No. 8, Diagnosis and Treatment of Swallowing Disorders (Dysphagia) in Acute-Care Stroke Patients. (AHCPR Publication No. 99-E024).
- o. Barker, J., Martino, R., Reichardt, B., Hickey E.J., Ralph-Edwards, A. (2009). Incidence and impact of dysphagia in patients receiving prolonged endotracheal intubation after cardiac surgery. *Can J Sug*, 52(2); 119-124.
- p. Daniels, S, Huckabee, M. (2013). *Dysphagia Following Stroke (2nd Edition)*. San Diego, CA, Plural Publications.
- q. Heffernan, C., Jenkinson, C. et. al. (2004). Nutritional Management in MND/ALS Patients: An Evidence Based Review. *Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders*, 5(2), 72-83.
- r. Hutchenson, K.A., Lewin, J.S., Barringer, M.S., Lisek, A., Gunn, B., Moore, M.W., Holisinger, C. (2012). Late dysphagia after radiotherapy-based treatment of head and neck cancer. *Cancer*, 118:5793-9.

- s. Kaib, S., Ries, M.T., Coperthwaite, M.C., Fox, D.J., Lefevre, N.T., Papadopoulos, S.M., and Sonntag V.K. (2013). Dysphagia after anterior cervical spine surgery: Incidence and risk factors, *World Neurosurgery*, 77: 183-187.
- t. Lagendijk, J.A., Doornaert, P., Rietveld, D.H., et al (2009). A predictive model for swallowing dysfunction after curative radiotherapy in head and neck cancer. *Radiother Oncol*, 90 (2): 189-95.
- u. Martino, R., Foley, N., Bhogal, S., Diamant, N., Speechley M., Teasell, R. (2005). Dysphagia after stroke, incidence, diagnosis, and pulmonary complications. *Stroke*; 36:2756-2762.
- v. Murray, J. (2006). *Manual of Dysphagia Assessment in Adults*. Clifton Park, NY: Delmar Cengage Learning.
- w. Nazaz, R., Lee, M.J., Yoo, J. (2002). Incidence of dysphagia after anterior cervical spine surgery: a prospective study. *Spine*, 27:22, 2453 – 2458.
- x. Occupational Therapy Practice Framework; Domain and Process. *American Journal of Occupational Therapy*, 56, 2002, 609-639.
- y. Schepp S.K., Tirschwell, D.L., Miller, R.M., Longstreth, W.T. (2012). Swallow screens after acute stroke: a systematic review. *Stroke*, 43:869-871.
- z. Scottish Intercollegiate Guidelines Network (SIGN). Management of patients with stroke: Identification and management of dysphagia. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN): 2010, Jun. 42 p (SIGN publication, no. 119).
- aa. Skoretz, S.A., Flowers, H.L., Martino, R. (2010). The incidence of dysphagia following endotracheal intubation: a systematic review. *Chest*, 127 (3): 509-510.
- bb. Smith-Hammond, C.A. and Goldstein, L.B. (2006). Cough and aspiration of food and liquids due to oral-pharyngeal dysphagia: ACCP (American College of Chest Physicians) Evidence-Based Clinical Practice Guidelines. *Chest*, 129 (1 Suppl), 1545-685.
- cc. Smith-Hammond, C.A., New, K.C., Pietrobon, R., Curtis, D., Scharver, C.H., Turner, D.A. (2004). Prospective analysis of incidence and risk factors of dysphagia in spine surgery patients: Comparison of anterior cervical, posterior cervical, and lumbar procedures. 29 (13), 1441 – 1446.
- dd. Stroke Rehabilitation. Clinical practice Guideline. Office of Quality and Performance. Department of Veterans Affairs.
- ee. Taylor-Goh, S, ed. (2005) Royal college of Speech & Language Therapists; Department of Health (UK); National Institute for Clinical Excellence (NICE) Royal College of Speech and Language Therapists Clinical Guidelines: 5.8 Disorders of Eating,

Drinking and Swallowing (Dysphagia) \ RCSLT Clinical Guidelines. Bicester, Speechmark Publishing Ltd.

ff. Tolep, K., Getch, C.L., Criner, G.J., (1996). Swallowing dysfunction in patients receiving prolonged mechanical ventilation. *Chest*, 109: 167-72.

gg. VA/DOD Clinical Practice Guideline for the Management of Stroke Rehabilitation, Management of Stroke Rehabilitation Working Group (2010) Veterans Health Administration, Department of Defense.

hh. VA/DoD Clinical Practice Guideline for the Management of Stroke Rehabilitation (2010).

**SYMPTOMS AND SIGNS OF SWALLOWING (OROPHARYNGEAL DYSPHAGIA)
AND FEEDING PROBLEMS**

A clinical consensus of common symptoms reported by a patient, caregiver or nursing staff member and signs of swallowing (oropharyngeal dysphagia) or feeding problems include but, are not limited to:

1. Self-Feeding:

- a. "Reduced Level of alertness or consciousness
- b. Easy distractibility, disinterest, drowsiness while eating
- c. Eating fast (impulsivity)
- d. Fatigue during a meal or does not complete a meal
- e. Reduced control of trunk, head and neck posture for eating
- f. Reduced arm or hand function to eat and drink
- g. Refusal to accept foods or liquids
- h. Rearranging, playing with food
- i. Attempts to ingest nonfood items
- j. Incorrect utensil selection or use
- k. Inability to open containers or grasp utensils
- l. Inability to cut food or load food onto

2. Oral Preparatory and Oral Transport Phase:

- a. *Slurred speech or difficulty speaking including changes in nasal resonance (dysarthria)
- b. Drooling (inability to control saliva in the mouth) while awake
- c. Oral spillage of food or liquid from the mouth
- d. Impaired chewing or munching
- e. Difficulty controlling food or liquid in the mouth
- f. Pocketing, holding of food in the oral cavity
- g. Facial weakness

- h. Tongue weakness or deviation of the tongue
- i. Dry mouth (xerostomia)
- j. Taste dysfunction (dysguesia or agusia)
- k. Missing teeth, dentures and poor oral hygiene
- l. Pain on swallowing (odynophagia)
- m. Pain due to infection (candidiasis)
- n. Delay or difficulty initiating the swallow
- o. Repeated throat clearing while eating
- p. *Coughing or choking before, during or after the swallow
- q. Modification of foods (small pieces of food, avoidance of regular foods, or blenderizing)
- r. Inability to complete a meal

3. Pharyngeal Stage:

- a. Food or liquid coming out of the nose (nasal regurgitation)
- b. Abnormal voice (phonation) quality, hoarse voice, or no voice (aphonia)
- c. *"Wet" or "gurgly" sounds before, during or after swallowing
- d. Weak or delayed voluntary cough
- e. Gagging when swallowing
- f. *Coughing or choking before, during or after swallowing
- g. Change in respiratory pattern while swallowing
- h. Reduced hyoid-laryngeal elevation
- i. Delayed initiation of the swallow
- j. Feeling of obstruction in pharynx

4. Esophageal Stage:

- a. Globus sensation (lump in the throat)

- b. Neck or chest pain
- c. Frequent heartburn or acid taste in the throat
- d. Food sticking in the chest or behind the breastbone (sternum)
- e. Difficulty swallowing solids > liquids
- f. Regurgitation of undigested food
- g. Bad breath

*Denotes a sign that has been associated with aspiration risk.

**EARLY IDENTIFICATION AND REFERRAL FOR SWALLOWING
(OROPHARYNGEAL DYSPHAGIA) PROBLEMS**

A clinical consensus or best practice for the early identification of swallowing problems and referral to a speech-language pathologist for a comprehensive clinical examination of swallow function.

Medical Diagnoses or Settings	Consensus or Best Practice
Acute Brain Injury (i.e, stroke and traumatic brain injury)	In the case of acute brain injuries the patient should be observed for signs/symptoms of swallowing problems (dysphagia) while in the ER. Individuals identified with signs or symptoms of swallowing problems should remain Nil per os (NPO) and receive a comprehensive clinical examination by a speech-language pathologist within 48 hours for an acute problem. Swallow function should be monitored daily by the medical providers and nursing staff during the first week of recovery.
Head and Neck Cancer	A comprehensive swallow examination should be completed prior to surgical resection or reconstruction and before radiotherapy or chemotherapy is initiated. Early intervention may be provided by the speech-language pathologist prior to surgery or organ preservation treatments. Reassessment of swallow function is needed throughout the course of organ preservation treatment to observe for changes in the status of the individual with dysphagia and to make adjustments in the management plan. Individuals identified with oropharyngeal dysphagia are typically reassessed at 1, 3, 6, and 12 months following surgery or cancer treatments or more frequently as recommended by the speech language-pathologist and medical provider. Follow-up assessment after 1 year is variable and determined by the speech-language pathologist and medical providers.
Critically Ill Patients	Critically ill patients have an increased risk for aspiration of secretions and regurgitated gastric contents and should be observed closely for signs and symptoms of swallowing problems(dysphagia) and referred as warranted. Older patients who are tube fed, aspiration of gastric contents is of greater concern as they are more likely to be colonized with pathogenic organisms and to have impaired host defenses.
Post-intubation (greater than 24 hours)	Patients requiring intubation for greater than 24 hours or repeated intubation should be observed by the medical providers and nursing staff members for signs of swallowing problems and referred to a speech-language pathologist for a comprehensive clinical exam of swallow function.

Medical Diagnoses or Settings	Consensus or Best Practice
Aspiration Pneumonia; Recurrent Aspiration Pneumonia; or Bronchitis Due to Suspected Aspiration	The American College of Chest Physicians recommends patients with cough and swallowing problems and patients with cough related to pneumonia and bronchitis who have received medical diagnosis and conditions associated with aspiration should be referred to a speech-language pathologist for a comprehensive clinical examination of swallow function.
Cervical Spine Surgeries and Abnormalities	Observe for signs of swallowing disorders (dysphagia) after cervical spine surgery and refer to the speech-language pathologist as warranted. The medical provider or surgeon may request an instrumental swallowing examination prior to surgery.
Progressive Neurological or Neuromuscular Diseases (i.e., Amyotropic Lateral Sclerosis, Parkinson's Disease, Progressive Supranuclear Palsy, Multiple Sclerosis, Myasthenia Gravis) and Previous History of Oropharyngeal Dysphagia	Patients with chronic swallowing disorders (oropharyngeal dysphagia) or a history of progressive neurological or neuromuscular disease with progressive dysphagia should be seen for regular reassessment as recommended by the speech-language pathologist to ensure the effectiveness and appropriateness of long-standing compensatory strategies including food or liquid modifications, swallowing maneuvers, or enteral nutrition therapy (tube feeding) and to make adjustments in the management plan.
Inpatient Admissions (including medical and surgical inpatient units)	Nursing staff members should observe the patient during intake of foods, fluids or medications as soon as possible and complete the admission assessment within 24 hours after admission. If clinical signs are present, referral to a speech-language pathologist is recommended.

Medical Diagnoses or Settings	Consensus or Best Practice
Community Living Center (CLC) or Long-Term Care Setting	<p>All patients admitted to a CLC should be observed by nursing staff members during intake of foods, fluids or medications at the time of admission and during meals for 3 – 5 days and if clinical signs are present refer to a speech-language pathologist. Patients with a chronic or progressive disorder with oropharyngeal dysphagia should be seen for regular reassessment as recommended by the speech-language pathologist to ensure the effectiveness and appropriateness of long-standing compensatory strategies including food or liquid modifications, swallowing maneuvers, or enteral nutrition therapy (tube feeding) and to make adjustments in the management plan. The medical providers or nursing staff members may request a reassessment as needed if a change swallowing or feeding is observed. Aspiration prevention strategies in a long-term care setting also include oral hygiene and review of prescription of medications that may increase risk of bacterial overgrowth, impair ability to swallow, or lead to dry mouth.</p>