



Competencies for
Dysphagia
Assessment and
Management in
Dietetic Practice

June 2017

Acknowledgements

The Alliance of Canadian Dietetic Regulatory Bodies (the Alliance) undertook the initiative to establish competencies required for safe, ethical, and effective practice in dysphagia related-care. This work is inline with provincial dietetic regulatory bodies' legislative mandate to regulate dietetic practice in the public interest.

The process to establish the competencies included conducting an environmental scan of dysphagia competencies and clinical practice standards, consulting dietitians, other health professionals, and Dietitians of Canada representatives, and validating the competencies via a national survey.

The Alliance expresses its acknowledgement and gratitude to dietitians who completed the national survey and who provided feedback on the drafts to ensure a clear, comprehensive, and valid outline of the knowledge, skills and judgements required for dysphagia assessment and management in dietetic practice in Canada.

Introduction

The *Competencies for Dysphagia Assessment and Management in Dietetic Practice* (dysphagia competencies) set out the expectations for safe, ethical, and effective dietetic practice in the area of dysphagia assessment and management. Dysphagia assessment and management falls within the professional dietetic scope of practice in all jurisdictions across Canada. However, legislation differs in each province, and therefore **practice varies across Canada**. Dietitians are accountable to practice dysphagia assessment and management according to their provincial regulatory body's standards and policies, and are encouraged to contact their provincial regulatory body with any questions or concerns.

Upon entry to practice, dietitians have a foundational knowledge and skill-set related to dysphagia assessment and management based on the entry-to-practice competencies ([*Integrated Competencies for Dietetic Education and Practice*](#) (ICDEP)). The dysphagia competencies **build on** the ICDEP and identify **additional** performance indicators for this area of practice. That is, the dysphagia competency statements do not stand-alone and are not a protocol. Despite their organization as discrete statements, the practice competencies are interdependent, each competency informing and qualifying the other competencies. These competencies may be used in disciplinary proceedings and for quality assessments, such as a practice-based assessment.

The dysphagia competencies identify the specific knowledge and skills required for screening, conducting a clinical (bedside) swallowing assessment, and for participation in an instrumental swallowing assessment. Performance indicators are not repeated in each section, as each section **builds on** the previous. For example, performance indicators outlined in the screening section (3.01), which are relevant to the clinical assessment, are not repeated in the clinical assessment section (3.02).

The practice environment, the client's needs, and the dietitian's personal knowledge and skills will define the dietitian's role. The dietitian may be the sole dysphagia practitioner, for example in a small facility or long term care setting. Other dietitians have access to a collaborative dysphagia team. In situations where another dysphagia clinician may not be readily available, these competencies can support the dietitian's acquisition of the knowledge and skills required to move beyond screening and to perform a clinical (bedside) swallowing assessment. Conversely, in facilities where the swallowing assessment is completed by another team member, the dietitian's role may be to screen, and refer to another clinician if an assessment is indicated.

These competencies apply to dietitians who are both gaining experience in this practice area as well as those with expertise. As careers progress and dietitians proceed to specialize in this practice area, additional education and experience will result in the acquisition of additional competencies. It is quite possible that dietitians with experience assessing and managing dysphagia will have *extensive* experience and expertise. These dietitians may develop competencies which are beyond the scope of the *Competencies for Dysphagia Assessment and Management in Dietetic Practice*.

Glossary

Adverse Events: Any unfavourable and unintended signs (including abnormal reactions), symptoms, or events temporally associated with the clinical swallowing assessment, management, or procedure that may or may not be considered related to the dysphagia assessment or management.

Circle of Care: Refers to the group of healthcare providers treating a client who need information to provide that care. Consent to share information with providers in the circle of care is generally implied. A client who accepts a referral to another healthcare provider implies consent for sharing relevant information. This includes sharing with physicians and other healthcare providers who are caring for the client, but does not include others such as family, friends, police, etc. Express consent is required to share information with others outside the circle of care.

Client (also known as Patient): The “client” is someone that an RD has established a professional client-RD relationship grounded with the intention to practice dietetics and deliver dietetic services.

Competency Statement: A synthesis of knowledge, skills, abilities and behaviours that nutrition and dietetic professionals must demonstrate in order to perform work roles and function successfully.

Compensative Strategies: Diet texture restrictions and modifications are the most common form of compensatory management recommended for dysphagia. Other strategies include postural changes (for example head turn and chin tuck postures), multiple swallows, and other "maneuvers". During the assessment, the client might be taught and asked to carry out different maneuvers. These are techniques that help to make the swallow safer or more effective.

Controlled Acts: Term used in the *Regulated Health Professions Act of Ontario* to describe a narrowly-defined list of invasive, higher risk activities that are outlined in provincial legislation), that must not be performed by any person in the course of providing health services, except:

- members of a regulated profession that have specific authority to do so in their regulations, based on their education and competence, and
- Unregulated/regulated persons who have been delegated the authority to perform the controlled act.

Cranial Motor Nerve Assessment: Conducting a series of exercises and observations to test for cranial motor nerve function (e.g., tongue mobility and strength, voice quality, lip closure, presence of gag reflex). It includes clients pursing lips, ability to lick lips, and move their tongue.

Dysphagia: Refers to difficulty passing food or liquid from the mouth to the stomach. Dysphagia can occur in different parts of the swallowing process. It could be an impairment in the ability to close the lips around food in the first place, or it could be interference with moving the food into the stomach.

Dysphagia can generally affect these three phases of swallowing:

- **Oral Phase:** Sucking, chewing, tasting, or moving a food or liquid within the mouth. Impairment is often caused by dry mouth, dental problems, muscle weakness, or difficulty coordinating the tongue, lips or cheeks.
- **Pharyngeal Phase:** Initiating the body's swallowing reflex to squeeze food or liquids down the back of the throat and simultaneously closing off the airway to prevent aspiration (food or liquid in the airway). This phase is often impaired due to neurological damage.
- **Esophageal Phase:** Relaxing and tightening the esophagus to propel food or liquid down to the stomach. This phase may be affected by irritation or a blockage.

Dysphagia Consistency/Texture: Refers to standardize language used to describe texture and liquid modifications and consistency.

Dysphagia Diet Modifications: Includes changes in food consistency, bolus size, and food/liquid temperature. Other modifications might include alternating solids and liquids.

Dysphagia Screening: Minimally invasive procedures to identify an individual who may or may not need a complete dysphagia assessment. Client can be fed or client to remain NPO (without oral food/beverages) until swallowing assessment is completed.

Dysphagia Assessment:

- **Bedside/tableside (clinical) swallowing assessment:** An assessment of a person's ability to manage food and/or liquid taken orally as assessed through food and/or liquid trials. A clinical swallowing assessment includes reviewing the medical history, respiratory function and any history of respiratory distress, medication effects, and reported / observed swallowing difficulty. The assessment will include, if allowed by client, an extensive cranial nerve evaluation. Using foods of various textures and/or liquids of various thicknesses the client will be assessed for oral/motor function including chewing ability, ability in forming a bolus, and oral transit time. The client will be also assessed for pharyngeal function with these foods and liquids, including

observations of residue post swallow, relative laryngeal movement and signs and symptoms of poor airway protection.

- **Instrumental Swallowing Assessment:** Swallowing study that requires the use of radiologic means videofluoroscopy (VFSS) or flexible endoscopes (FEES) to visually identify swallowing issues.
 - **Videofluoroscopic Swallowing Study (VFSS):** Also called Modified Barium Swallow Procedure. This type of instrumental assessment is conducted to identify the physiologic swallowing impairment and to determine whether any therapeutic strategies will make the swallow safer (e.g., eliminate aspiration) or more efficient (e.g., improve flow of food and liquid through the mouth and throat); the client will swallow liquids and solids mixed with barium, which will enable the anatomic structures as well as the barium liquids and solids to be visualized in real-time during swallowing in a scan. Barium is mixed with the pudding and applesauce first. If bread or a cookie is used in the VFSS, then it is coated with barium. When management strategies are introduced, changes in flow of food and liquid barium as well as improvement in structural movement during the swallow can be visualized with this type of assessment.
 - **Fiberoptic Endoscopic Evaluation of Swallowing (FEES):** Involves insertion of the endoscope through the nose into the upper throat. The trained healthcare professional observes the throat and larynx while the client swallows foods of various types. (Note: Endoscopic evaluation of voice, breathing patterns, swallowing and velopharyngeal functioning is typically completed by a Speech Language Pathologist or other health care professionals who has been trained in the performance of endoscopy evaluations).

Interprofessional Collaboration: Team members learning about, from and with each other to practice in the interest of client-centred service. Often involves the distribution of the tasks associated with client care in the way that best serves the client's best interests. This may take into account: clinical appropriateness (what is the most appropriate course of treatment for the client), safety (which providers have the appropriate knowledge, skills and judgement to perform particular activities and how best to ensure seamless transition and communication between the members of the team) and efficiency (which provider is best positioned to perform the activity in a timely manner and without undue expense).

Lateral View: Refers to the first view of the client which shows if/when the client aspirated (inhalation of residual bolus particles or refluxed stomach contents into the airway after the swallow). Anterior-posterior follows the lateral view to identify aspiration.

Mealtime/Feeding Observation: A feeding trial of recommended food textures and liquid consistencies appropriate to the client's condition. During the feeding mealtime observation, the client will be closely observed for tolerance to the recommended diet, and be monitored for signs of fatigue throughout the trial and distress to any specific food textures and liquid consistencies. The mealtime/feeding observation will include documentation of what is observed and if client has difficulty with the current diet, a consultation request will be made for a swallowing assessment.

Nutrition Care Process (NCP): Systematic approach to providing high-quality nutrition care. NCP focuses on individualize care, taking into account the client's needs and values and using the best evidence available to make decisions. The Nutrition Care Process consists of distinct, interrelated steps: Nutrition Assessment, Diagnosis, Intervention, Monitoring/Evaluation.

Overlapping Scopes: The scopes of practice of Speech Language Pathologists, Occupational Therapists, Physiotherapists, Nurses and Registered Dietitians with respect to dysphagia assessment and management are recognized and valued, providing potential for some role overlap, shared skills, and complementary roles. Overlapping scopes of practice of health care providers is intended to facilitate interprofessional collaboration and enable efficient and effective client-centred services. The Registered Dietitian independently performs a swallowing assessment or does so in collaboration with other health professionals.

Performance Indicators: Provides the action statements (verbs) that describe how a competency is demonstrated in practice.

Radiographic/Anatomical Landmarks: Radiographic landmarks are anatomical landmarks you use to locate other structures on the X-ray (e.g., obvious structures you can see, such as teeth, mandible, epiglottis, etc.).

Reserved Act: Term used in the *Regulated Health Professions Act of Manitoba* to refer to activities that could pose significant risk or possible harm to the public if performed by someone without the necessary competence and skill. No person shall perform a reserved act in the course of providing health care unless (a) the person is a member of a regulated health profession, and is authorized by regulation to perform the reserved act; (b) the performance of the reserved act has been delegated to the person by a member described in clause (a) in accordance with section 6; (c) the person performing it (i) has the consent of, and is being supervised by, a member described in clause (a), in accordance with the regulations made by the member's college, and (ii) is authorized to perform the reserved act by a regulation made by the member's college under this Act; (d) the person is authorized to perform it by or under another enactment; or (e) the person is authorized to perform it by an order under section 7 (public health emergency).

Restricted Activities: Term used in the *Health Professions Act* and the *Government Organizations Act of Alberta* and *Health Professions Act of British Columbia* which defines a restricted activity as a procedure or service that requires specific professional competence to be performed safely. The Colleges are responsible for regulating the safe performance of restricted activities by its members. In Alberta and British Columbia, Registered Dietitians and Registered Nutritionists require special authorization from the College to perform these restricted activities.

Reserved Activities: Term used in the *Professional Code* of Quebec to describe activities that may only be practised by members of professional orders authorized to do so. This law protects members of the public who seek professional services that pose a high risk of harm.

Scope of Practice: The scope of practice for regulated health professionals is established in provincial legislation. Dysphagia assessment and management falls within the professional dietetic scope of practice in all jurisdictions across Canada. Legislation differs in each province, and therefore practice varies across Canada.

Strategy: A plan for achieving a goal. People with swallowing disorders may benefit from using strategies to do the tasks that have become difficult for them. These include chin tuck, positioning etc. Please also see *Compensatory Strategies* described above.

Swallowing: A process that begins when a liquid or solid bolus (ball of chewed food) is propelled to the back of the mouth into the pharynx by the tongue. The upper esophageal sphincter relaxes, allowing the bolus to pass into the upper esophagus. In response to swallowing, an orderly, progressive contraction of the esophageal body occurs (primary peristalsis), propelling the bolus down the esophagus. The lower esophageal sphincter relaxes as the food reaches the lower esophagus, allowing the passage of the food to the stomach. Peristalsis and relaxation of esophageal muscles are controlled by the brain stem, several cranial nerves, and the vagus nerve.

Competencies for Dysphagia Assessment and Management in Dietetic Practice

PROFESSIONAL PRACTICE

- 1.01 Comply with federal and provincial/territorial requirements relevant to dietetic practice.
- Demonstrate knowledge of federal legislation, regulations, and policies applicable to practice.
 - Recognize non-compliance with federal legislation, regulations, and policy.
 - Demonstrate knowledge of provincial/territorial legislation, regulations, and policies applicable to practice.
 - Recognize non-compliance with provincial/territorial legislation, regulations, and policies.
 - Identify federal and provincial/territorial requirements relevant to practice setting.
- SUBSTATEMENT. Identify provincial and territorial requirements related to dysphagia assessment, including controlled, restricted, and reserved acts.*
- 1.02 Comply with regulatory requirements relevant to dietetic practice
- Demonstrate knowledge of bylaws and regulations relevant to practice.
 - Recognize non-compliance with bylaws and regulations.
 - Demonstrate knowledge of regulatory scopes of practice, standards of practice and code of ethics.
 - Recognize non-compliance with regulatory scope of practice, standards of practice and code of ethics.
 - Identify regulatory requirements relevant to practice setting.
 - Comply with applicable regulatory requirements.
- SUBSTATEMENT. Comply with regulatory requirements related to dysphagia assessment and management including standards, policies, and directives.*
- Demonstrate knowledge of principles of confidentiality and privacy.
 - Demonstrate knowledge of scenarios of non-compliance with confidentiality and privacy requirements.
 - Maintain client confidentiality and privacy.
 - Demonstrate knowledge of principles of informed consent.
 - Demonstrate knowledge of methods to obtain informed consent.
 - Ensure informed consent.
 - Demonstrate knowledge of the elements of professional boundaries.

- 1.03 Practice according to organizational requirements
- a. Demonstrate knowledge of the role and features of job descriptions.
 - b. Provide services in compliance with designated role within practice setting.
 - c. Demonstrate knowledge of policies and directives specific to practice setting.
 - d. Comply with applicable policies and directives.

Additional performance indicators specific to dysphagia assessment and management

e. Comply with institution-specific risk-management procedures for dysphagia management.

- 1.04 Practice within limits of individual level of professional knowledge and skills
- a. Demonstrate knowledge of principles of reflective practice.
 - b. Reflect upon and articulate individual level of professional knowledge and skills.
 - c. Recognize situations which are beyond personal capacity.

- 1.05 Address professional development needs
- a. Demonstrate knowledge of principles of self assessment and learning plan development.
 - b. Self-assess to identify learning needs.
 - c. Develop and pursue a learning plan.
 - d. Integrate learning into practice.

- 1.06 Use a systematic approach to decision making
- a. Demonstrate knowledge of the role of ethics, evidence, contextual factors and client perspectives in decision making.
 - b. Demonstrate knowledge of ethical principles for decision making.
 - c. Demonstrate knowledge of approaches to obtain and interpret evidence to inform decision making.
 - d. Demonstrate knowledge of contextual factors that may influence decision making.

SUBSTATEMENT i. Consider quality of life issues related to dysphagia assessment and management.

SUBSTATEMENT ii. Consider end of life issues related to dysphagia assessment and management.

- e. Obtain and interpret evidence.
- f. Apply ethical principles.
- g. Demonstrate knowledge of the rationale for and methods of including the client in decision making.
- h. Make and justify decisions in consideration of ethics, evidence, contextual factors, and client perspectives.

- 1.07 Maintain a client centred focus
- a. Demonstrate knowledge of the legal and moral basis for respecting individual rights, dignity and uniqueness.
 - b. Respect client rights, dignity and uniqueness.
 - c. Determine client perspectives and needs.
 - d. Integrate client perspectives and needs into practice activities.
- SUBSTATEMENT i. Integrate quality of life considerations into the dysphagia management plan.*
- SUBSTATEMENT ii. Integrate end of life considerations into the dysphagia management plan.*
- SUBSTATEMENT iii. Utilize advanced directives and relate documents that provide information regarding an individual's wishes.*
- 1.08 Manage time and workload effectively
- a. Demonstrate knowledge of principles for managing time and workload.
 - b. Prioritize professional activities and meet deadlines.
- 1.09 Use technologies to support practice
- a. Demonstrate knowledge of communication technologies relevant to practice, and their appropriate uses.
 - b. Use technology to communicate.
 - c. Demonstrate knowledge of technologies to seek and manage information relevant to practice, and their appropriate uses.
 - d. Use technology to seek and manage information.
 - e. Demonstrate knowledge of technological applications used in practice settings.
 - f. Use technological applications in practice.
- 1.10 Ensure appropriate and secure documentation
- a. Demonstrate knowledge of documentation principles.
 - b. Document relevant information accurately and completely, in a timely manner.
 - c. Demonstrate knowledge of principles of security and access.
 - d. Maintain security and confidentiality of records.
 - e. Identify organizational requirements for record keeping.
 - f. Demonstrate knowledge of legal requirements for record keeping.
 - g. Document in accordance with legal and organizational requirements.

- 1.11 Assess and enhance approaches to dietetic practice
 - a. Demonstrate knowledge of the role of evidence, self-reflection, and consultation in assessing effectiveness of approaches to practice.
 - b. Demonstrate knowledge of sources of evidence to assess effectiveness of approaches to practice.
 - c. Assess effectiveness of practice activities.
 - d. Recognize the importance of new knowledge to support or enhance practice.
 - e. Seek new knowledge that may support or enhance practice activities.
 - f. Propose modifications to increase the effectiveness of practice activities.

- 1.12 Contribute to advocacy efforts related to nutrition and health
 - a. Demonstrate knowledge of principles of advocacy.
 - b. Identify advocacy opportunities and activities in dietetic practice.
 - c. Identify opportunities for advocacy relevant to practice setting.

- 1.13 Participate in practice based research
 - a. Demonstrate knowledge of research and evaluation principles.
 - b. Identify research questions, methods, and ethical procedures related to dietetic practice.
 - c. Source, critically appraise and interpret literature relevant to a research question.
 - d. Summarize and communicate research information.

COMMUNICATION AND COLLABORATION

- 2.01 Select appropriate communication approaches
 - a. Demonstrate knowledge of opportunities for and barriers to communication.
 - b. Identify opportunities for and barriers to communication in the practice setting.
 - c. Demonstrate knowledge of communication techniques and their appropriate uses.
 - d. Use appropriate communication technique(s).
 - e. Demonstrate knowledge of medical and dietetics-related terminology.
 - f. Demonstrate knowledge of practice-setting-related terminology.
 - SUBSTATEMENT. Use consistent dysphagia terminology within the circle of care when describing texture modification of foods and liquids.*
 - g. Use appropriate terminology.

- 2.02 Use effective written communication skills
 - a. Demonstrate knowledge of ways to determine written communication needs of the reader.
 - b. Demonstrate knowledge of the elements of effective written material.
 - c. Edit written material for style, spelling, and grammar.
 - d. Write clearly and concisely in a manner responsive to the needs of the reader(s).
 - e. Write in an organized and logical fashion.
 - f. Provide accurate and relevant information in written material.
 - g. Ensure that written material facilitates communication.

- 2.03 Use effective oral communication skills
 - a. Demonstrate knowledge of elements of effective oral communication.
 - b. Speak clearly and concisely in a manner responsive to the needs of the listener (s.)
 - c. Demonstrate knowledge of the impact of tone of voice and body language on the communication process.
 - d. Use appropriate tone of voice and body language.
 - e. Recognize and respond appropriately to non-verbal communication.

- 2.04 Use effective interpersonal skills
 - a. Demonstrate knowledge of principles of active listening.
 - b. Utilize active listening.
 - c. Demonstrate knowledge of ways to engage in respectful communication.
 - d. Communicate in a respectful manner.
 - e. Demonstrate knowledge of ways to communicate empathically.
 - f. Demonstrate empathy.
 - g. Demonstrate knowledge of ways to establish rapport in communication.
 - h. Establish rapport.
 - i. Demonstrate knowledge of counseling principles.
 - j. Apply counselling principles.
 - k. Demonstrate knowledge of principles of negotiation and conflict management.
 - l. Apply principles of negotiation and conflict management.
 - m. Demonstrate knowledge of effective ways to give and receive feedback.
 - n. Seek, respond to, and provide feedback.

2.05 Contribute to the learning of others

- a. Recognize opportunities to contribute to the learning of others.
- b. Demonstrate knowledge of ways to assess the prior knowledge and learning needs of others.
- c. Assess the prior knowledge and learning needs of others.
- d. Demonstrate knowledge of educational strategies relevant to practice, and their appropriate uses.
- e. Select and implement appropriate educational strategies.
- f. Demonstrate knowledge of learning resources, and their appropriate use in practice.
- g. Select learning resources.
- h. Demonstrate knowledge of ways to develop learning resources.
- i. Develop learning resources.
- j. Demonstrate knowledge of ways to establish and assess learning outcomes.
- k. Establish and assess learning outcomes.
- l. Demonstrate knowledge of ways to develop and deliver effective group educational sessions.
- m. Deliver group educational sessions.

Additional performance indicators specific to dysphagia assessment and management

- n. Educate food services staff and caregivers to ensure understanding and ability to produce and provide texture modified foods and liquids consistent with the client's nutrition care plan*
- o. Educate and supervise relevant others in the screening, assessment, and management of swallowing difficulties.*
- p. Deliver education to staff/caregivers regarding management, monitoring, and complication prevention related to dysphagia.*

2.06 Contribute productively to teamwork and collaborative processes

- a. Demonstrate knowledge of scenarios where dietetics knowledge is a key element in health care delivery.
- b. Demonstrate knowledge of ways to effectively contribute dietetics knowledge in collaborative practice.
- c. Contribute dietetics knowledge in collaborative practice.
- d. Demonstrate knowledge of scenarios where the expertise of other health care providers is a key element in dietetic practice.
- e. Identify ways to draw upon the expertise of others.
- f. Draw upon the expertise of others.
- g. Contribute to shared decision making.
- h. Demonstrate knowledge of principles of teamwork and collaboration.
- i. Facilitate interactions and discussions among team members.

Additional performance indicators specific to dysphagia assessment and management

- j. Collaborate within the circle of care to identify and use consistent dysphagia terminology.*
- k. Learn with, from, and about other members of the interprofessional team.*
- l. Identify how interprofessional practice enhances client care outcomes.*
- m. Utilize overlapping scopes of practice to optimize care.*
- n. Collaborate within and between teams across the continuum of care for dysphagia assessment and management.*
- o. Contribute to the evaluation of the effectiveness of the interprofessional team.*

NUTRITION CARE

- 3.01 Assess nutrition related risks and needs
 - a. Demonstrate knowledge of principles for selection and use of nutrition risk screening strategies.
 - b. Use appropriate nutrition risk screening strategies.
 - c. Demonstrate knowledge of ways to identify relevant data to perform a nutrition assessment.
 - d. Identify relevant assessment data to collect.
 - e. Demonstrate knowledge of methods to obtain perspective of client, family, and/or relevant others.
 - f. Obtain perspective of client, family, or relevant others.
 - g. Demonstrate knowledge of principles for obtaining and interpreting a medical history.
 - h. Identify principles for selection of relevant medical information.
 - i. Obtain and interpret medical history.
 - j. Demonstrate knowledge of ways to obtain and interpret demographic, psycho-social and health behaviour history.
 - k. Demonstrate knowledge of principles for selection of relevant demographic, psycho-social and health behaviour data.
 - l. Obtain and interpret demographic, psycho-social and health behaviour history.
 - m. Demonstrate knowledge of principles for obtaining and interpreting food and nutrient intake data.
 - n. Obtain and interpret food and nutrient intake data.
 - o. Demonstrate knowledge of principles to identify food and nutrition related learning needs of clients.
 - p. Identify client learning needs related to food and nutrition.
 - q. Demonstrate knowledge of principles for obtaining and interpreting anthropometric data.
 - r. Obtain and interpret anthropometric data.
 - s. Demonstrate knowledge of ways to obtain and interpret biochemical and medical test/procedure data.
 - t. Demonstrate knowledge of principles to identify relevant biochemical and medical test/procedure data.
 - u. Obtain and interpret biochemical data and results from medical tests and procedures.
 - v. Demonstrate knowledge of ways to obtain and interpret information from mealtime/feeding observations.

w. Obtain and interpret information from mealtime/feeding observations.

SUBSTATEMENT. Determine environmental factors contributing to dysphagia risk, including client positioning, and feeding techniques.

x. Identify signs and symptoms of nutrient deficiencies or excesses.

y. Demonstrate knowledge of ways to obtain and interpret nutrition-focused physical observation data.

z. Obtain and interpret nutrition-focused physical observation data.

aa. Identify signs and symptoms of dysphagia.

bb. Demonstrate knowledge of principles for swallowing assessment.

cc. Identify chewing, swallowing, and feeding problems.

dd. Demonstrate knowledge of selection and use of methods used to determine energy, protein, fluid, macronutrient, micronutrient, electrolyte, and trace element requirements.

ee. Perform calculations to determine nutritional requirements.

ff. Determine client nutritional requirements.

gg. Identify methods to integrate assessment findings and identify nutrition problems.

hh. Integrate assessment findings to identify nutrition problem(s).

Additional performance indicators specific to dysphagia assessment and management

ii. Identify, analyze, and evaluate the potential risks related to feeding and swallowing.

jj. Prioritize request for assessment based on risk.

kk. Determine the need for a clinical swallowing assessment.

3.011 Conduct a clinical swallowing assessment

a. Demonstrate understanding of the phases of swallowing.

b. Assess anatomy and function of the swallow.

c. Observe for distress or intolerance prior to the start of the assessment.

d. Identify potential cause(s) for distress or intolerance.

e. Use complementary techniques including pulse oximetry, ultrasound, manometry, and electromyography (EMG), as indicated.

f. Ensure client equipment and supplies are positioned for assessment.

g. Assess client's tolerance of fluid consistencies.

h. Assess client's tolerance of food textures.

i. Identify and use compensatory strategies and assess the effect on swallowing function.

j. Manage adverse events.

k. Recognize when to terminate assessment related to adverse reactions.

- l. Perform Cardio Pulmonary Resuscitation and manage airway obstruction (RD is certified in CPR if assessing without another health professional certified in CPR).*
- m. Use personal protective equipment, routine precautions, and disinfecting protocols, as required.*

3.012 Participate in the videofluoroscopic swallowing study

- a. Identify advantages, disadvantages, indications and limitations of videofluoroscopy.*
- b. Assess suitability for videofluoroscopy.*
- c. Identify necessary precautions to minimize radiation exposure.*
- d. Prepare or assist in preparing appropriate foods and liquids with contrast agents for videofluoroscopy.*
- e. Ensure client is positioned for optimal imaging and swallowing function.*
- f. Demonstrate understanding of anatomical and radiographic landmarks.*
- g. Demonstrate understanding of the use of lateral and anterior-posterior views.*
- h. Assess client's ability to protect and clear airway before, during and after swallow.*
- i. Identify and use compensatory strategies and assess the effect on swallowing function and airway protection.*
- j. Review and interpret findings, including limitations.*

3.02 Develop nutrition care plans

- a. Demonstrate knowledge of principles for prioritization of nutrition care goals based on risk and available resources.
- b. Prioritize nutrition care goals based on risk and available resources.
- c. Demonstrate knowledge of ways to identify and select appropriate nutrition interventions.
- d. Select appropriate nutrition interventions.
- e. Demonstrate knowledge of ways to identify and select appropriate textural and therapeutic diet modifications.
- f. Select appropriate textural and therapeutic diet modifications.
- g. Demonstrate knowledge of principles for development and modification of meal plans.
- h. Develop or modify meal plans.
- i. Demonstrate knowledge of principles for supplement selection and use.
- j. Determine supplementation needs.
- k. Demonstrate knowledge of principles of enteral nutrition.
- l. Demonstrate knowledge of methods for designing enteral feeding regimens.
- m. Calculate enteral nutrition regimen requirements.
- n. Design enteral feeding regimens.
- o. Demonstrate knowledge of principles of parenteral nutrition.
- p. Demonstrate knowledge of methods for designing parenteral feeding regimens.

- q. Calculate parenteral nutrition regimens requirements.
- r. Design parenteral feeding regimens.
- s. Demonstrate knowledge of principles for development of a client support plan.
- t. Develop client support plan.
- u. Demonstrate knowledge of principles for development of a client education plan.
- v. Develop client education plan.
- w. Demonstrate knowledge of strategies for monitoring and assessment of nutrition care plan outcomes.
- x. Select strategies to monitor and assess nutrition care plan outcomes.

Additional performance indicators specific to dysphagia assessment and management

y. Identify risk mitigating strategies.

z. Ensure that nutrition care plans and mealtime management strategies are documented, coordinated, practical, feasible, safe, and effective.

3.03 Manage implementation of nutrition care plan

- a. Identify ways to implement nutrition interventions.
- b. Implement nutrition interventions.

SUBSTATEMENT i. Implement appropriate consistency/texture and therapeutic nutrition interventions within the context of the foodservice system.

SUBSTATEMENT ii. Develop mealtime management plan including safe and optimal swallow strategies.

- c. Identify the roles of team members in supporting the implementation of a care plan.
- d. Identify strategies to communicate nutrition care plan with client, interprofessional team and relevant others.
- e. Coordinate implementation of care plan with client, interprofessional team and relevant others.
- f. Provide nutrition education and counselling.

3.04 Evaluate and modify nutrition care plan as appropriate

- a. Evaluate client progress in achieving plan outcomes.
SUBSTATEMENT: Monitor nutrition and hydration status.
- b. Identify factors impacting the achievement of outcomes.
SUBSTATEMENT: Monitor for signs and symptoms of aspiration.
- c. Identify necessary changes to nutrition care plan.
- d. Implement changes to nutrition care plan.

Additional performance indicators specific to dysphagia assessment and management

e. Recommend additional assessment, as indicated.

MANAGEMENT

5.03 Manage Food Services

- a. Demonstrate knowledge of ways to determine food service needs of a client group.
- b. Identify the food service needs of a client group based upon their nutritional, cultural and physical characteristics.
- c. Demonstrate knowledge of the range of human resource, financial, technical and equipment needs that must be addressed in the provision of food services.
- d. Identify human, financial, technical and equipment resources required for the provision of food services.
- e. Demonstrate knowledge of menu development and modification principles.
- f. Create and modify menus using menu planning principles.
- g. Demonstrate knowledge of processes for purchasing, receiving, storage, inventory control and disposal activities in food services.
- h. Contribute to purchasing, receiving, storage, inventory control and disposal activities for food products.
- i. Demonstrate knowledge of food production and distribution procedures in food services.
SUBSTATEMENT. Demonstrate knowledge of factors that impact consistency and texture parameters in food production.
- j. Contribute to food production and distribution activities.
- k. Contribute to improvement initiatives related to food services.
- l. Contribute to activities related to compliance with health and safety requirements.
- m. Demonstrate knowledge of approaches to marketing food services.

Additional performance indicators specific to dysphagia assessment and management

n. Ensure food textures and liquid consistencies correspond to diet order.