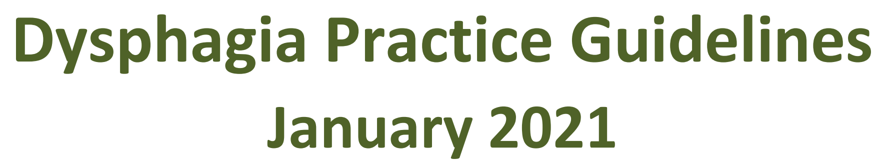
Dysphagia Practice Guidelines
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College of Speech-Language
Pathologists and Audiologists
of Saskatchewan

Dysphagia Practice Guidelines

Table of Contents

1) Background
    a. Aim of Guideline
    b. Guideline Committee
    c. Methodology
    d. Overview of Dysphagia
    e. SLP Roles and Responsibilities
        i. Current Practice and Educational Requirements
        ii. Collaborative Practice
        iii. Professional Standards
        iv. Advanced Practices in Dysphagia
        v. Ethical Provision of Dysphagia Services
    f. Scope

2) Guideline Recommendations
    a. Competencies
        i. Basic competencies
        ii. Special populations
        iii. Pediatric services
    b. Risk Management

3) Appendices and References
    a. Appendix A - Glossary of Terms and Abbreviations
    b. Appendix B – Advanced Practice Guidelines and Other Resources
    c. Appendix C – Clinical Swallowing Assessment Competencies
    d. References

BACKGROUND

a) Aim of Guideline

The aim of these guidelines is to provide direction regarding competencies that Speech-Language Pathologists (S-LPs) who are new to the profession, new to dysphagia practice or those who are increasing their expertise must acquire in order to provide safe, ethical and effective practice in the areas of feeding and swallowing. It is essential that S-LPs working in the area of dysphagia have the necessary competencies, resources and equipment to provide appropriate services because of the risk for harm that can result if lacking in any of these requisites.

Based on The Canadian Alliance of Audiology and Speech-Language Pathology Regulators' (CAASPR) competency profile for S-LPs, it is expected that all S-LPs will have acquired "entry-to-practice" competencies related to tasks such as documentation. Therefore, this document will focus on those competencies specifically related to the practice of dysphagia.

The Code of Ethics of the College of Speech-Language Pathologists and Audiologists of Saskatchewan (CSASK) states registrants are ethically bound to "engage only in the provision of services that fall within their professional competence, considering their level of education, training and experience". CSASK recognizes that dysphagia practice is evolving and that those who work in the area require continuing education to remain competent throughout their careers. Additionally, in order to move beyond entry-to-practice competencies, advanced skills training in specific areas or procedures is required. Members must have accurate and honest assessments of their own abilities and experience to engage in ethical practice.

How this Guideline should be used

- This guideline is to be used as a framework to make responsible decisions regarding feeding and swallowing service delivery. Clinicians must document and be prepared to fully explain departures from this guideline.
- Competencies may be used in disciplinary proceedings and for quality assessments (e.g., practice-based assessments) and to support the acquisition of knowledge and skills required to complete more advanced dysphagia practices.
- These guidelines may be used as the basis for creating and supporting advanced practice legislation in Saskatchewan.
- The guideline is not intended to be a tutorial or provide all information required to practice in the area.

b) Guideline Committee

These guidelines are built from the work of the College of Speech and Hearing Health Professionals of BC, the Alberta College Of Speech-Language Pathologists & Audiologists, the College of Audiologists and Speech-Language Pathologists of Ontario, the Canadian Alliance of Audiology and Speech-Language Pathology Regulators, Speech and Audiology Canada, the American Speech–Language–Hearing Association, the United Kingdom's National Dysphagia Competence Steering Group and the Alliance of Canadian Dietetic Regulatory Bodies.

The committee is comprised of S-LPs who are currently licensed by CSASK and who have dysphagia experience with children and/or adults.

- Bill Feldbruegge, Alissa Steckler, Jenna Singbeil, Cynthia Bakker, Chantelle Thomas, Marcie Conrad, and Kathy Carroll.

c) Methodology

The committee completed a literature review and each committee member was responsible to draft a section of the document for which they had the most experience and knowledge. The sections were edited together to create the initial draft document. The draft document was approved by the CSASK Council to be vetted by the CSASK registrants. The final vetted document was approved by the CSASK Council.

d) Overview of Dysphagia

Eating and drinking are processes that healthy people take for granted. These acts provide nourishment and hydration and are an important part of many social interactions. Dysphagia refers to feeding/swallowing difficulty and may arise from many and varied underlying medical conditions. It can affect individuals at any age. When a person has specific difficulty with feeding or swallowing it can impact all areas of his or her life.

People who experience dysphagia may be at risk for malnutrition, dehydration, airway obstruction and aspiration pneumonia as well as impaired growth and development. Dysphagia can also reduce recovery and rehabilitative potential following illness or injury and may lead to social isolation and increased stress for caregivers and families.

Management of dysphagia requires assessment and consideration of appropriate, client specific options to provide nutrition and hydration while minimizing risk for airway occlusion or aspiration. Typically, S-LPs employ texture-based diets that are age appropriate or that are staged to match developmental progression or recovery from illness. Ethical practice, when using texture restricted diets, would dictate adopting a minimally restrictive diet and consideration for patient/client wishes. Other adaptive or rehabilitative measures have been developed and may be used as appropriate. Effective management can prevent critical illness, promote well-being, support infant development and assist in recovery from illness of injury.

e) SLP Roles and Responsibilities

i. Current Practices and Educational Requirements

As a basic standard, accredited S-LP programs in Canada require students to complete graduate level course work in anatomy, physiology, and dysphagia. To attest to this fact, CAASPR expects that all S-LPs will have acquired “entry-to-practice” competencies related to feeding and swallowing after the completion of a professional master’s degree in speech-language pathology. S-LP students also have the opportunity to participate in supervised clinical dysphagia practice. Participation in supervised clinical dysphagia practice increases the chances a new graduate will be qualified for employment in the field.

The course work in these master's programs is intended to provide S-LPs with basic knowledge and requirements of principles and procedures for diagnosis and treatment across the lifespan. For example, they gain knowledge concerning complications associated with management, as well the skills required to develop remediation plans and functional goals within an interdisciplinary framework. Although the basic dysphagia training that S-LP students receive is beyond that of many other professions, the need for additional hands on training and education for S-LPs who will be working regularly in this area of the field is recognized. S-LPs have been leaders in dysphagia research and instrumental in driving forward knowledge about assessment and management of dysphagia.

ii. Collaborative Practice

CSASK recognizes individuals with dysphagia are best served by professionals with specialized training and skills. Assessment and management of dysphagia often relies on the contributions of a variety of professions, each of which have specialized training and areas of expertise. The graduate level training Speech Language Pathologists receive provides a skill set that is unique and prepares S-LPs to assume roles in dysphagia practise. S-LPs work collaboratively with other professionals, individuals, families and caregivers to employ a holistic approach to dysphagia intervention.

iii. Professional Standards

CSASK requires all registrants abide by the CSASK Code of Ethics and engage only in the provision of services that fall within their professional competence, considering their level of education, training and experience. By limiting practice to the area(s) of the profession in which S-LPs have the knowledge, skills and experience to practice lawfully, safely and effectively, the possible danger to the public and the practitioner is limited.

S-LPs entering into professional practice should seek out mentorship from a skilled and competent clinician (e.g., for direct supervision and support, as well as to discuss questions and concerns) and education that will support their roles in dysphagia practice. Any claim to competency for dysphagia practice should be specific in terms of experience, population, and training for clinical procedures or instrumental tests.

iv. Advanced Practices in Dysphagia

S-LPs must make every effort to maximize patient safety when administering swallow assessment and management procedures. Any CSASK registrant involved in dysphagia service delivery must ensure they are practicing competent and sound measures to maximize patient safety.

The following are common advanced practices in dysphagia that require skills, training and education beyond entry level skills. Prior to participating in any advanced practices, CSASK registrants must ensure they have the required skills and knowledge. Registrants are advised to review and consider the guidelines available through ASHA as well as those in other regulated jurisdictions throughout Canada (see Appendix B for more detail).

- Assessment/treatment of special populations (NICU, PICU, ICU, Head and Neck Cancer)
- Fiberoptic Endoscopic Evaluation and Management of Swallowing (FEES)

- Videofluoroscopic Assessment of Swallowing Disorders in Adults
- Videofluoroscopic Assessment of Swallowing Disorders in Pediatrics
- Swallowing Assessment and Management for Tracheostomy and/or Ventilator Dependent Patients

v. Ethical Provision of Dysphagia Services

The decision-making process for dysphagia management and treatment options can be complex. In particular, end of life decisions about comfort measures, eating at risk or feeding tube placement include not only practical concerns for patients and families but also are frequently made more difficult by the emotions that accompany these situations.

S-LPs should have a solid grounding in medical ethics and understand the consequences that may arise from the advice and counselling they provide. It is important that dysphagia clinicians provide objective and correct information. There are four well accepted pillars of medical ethics[1]:

- *Autonomy* – Patients have the right to choose actions consistent with their values, goals, and life plans, even if their choices are not in agreement with those of the family members or care providers. Informed Consent plays a large roll in this pillar (see the CSASK Documentation and Record Management Guideline document for more details).
- *Beneficence* – Clinicians must adhere to the highest standards of evidence-based practice to provide services that are for the benefit of others and produce "good". What is "good", is defined by the patient.
- *Nonmaleficence* – Clinicians should bring no harm and avoid actions that will increase the risk of a negative consequence (e.g., not gaining informed consent, practicing without the proper skills or supervision, …).
- *Justice* – Patients must be treated equally and fairly. For example, all patients should have equal access to treatment but not all patients will require the same type or amount of treatment to be treated fairly (e.g., a patient suffering from dysphagia caused by a severe stroke may require more treatment time than an individual experiencing dysphagia post extubation).

This document is not intended to be a tutorial in medical ethics but, as there is much easily obtainable information on the topic, all dysphagia clinicians should have basic awareness and understanding.

f) Scope of Practice

Scope of practice describes the procedures, actions, and processes that a healthcare practitioner is permitted to undertake in keeping with the terms of their professional license. Some Canadian jurisdictions have scope of practice legislation. For example, ACSLPA and CASLPO have their scope of practice written in their Acts. With the exception of a small number of regulated health professionals (e.g., the Saskatchewan College of Physicians and Surgeons), Saskatchewan does not have scope of practice legislation. Not having scope of practice legislation forces CSASK registrants to rely heavily on following the Code of Ethics and only engaging in the provision of services that fall within their professional competence, considering their level of education, training and experience. S-LPs receive

training in physiology of swallowing, infant development and the process of ageing and, compared to other professions, the entry level education and training that S-LPs receive provides a unique and robust basis for dysphagia practice across the lifespan.

GUIDELINES

a) Competencies

S-LPs must have the required competencies to provide dysphagia services.

A competency framework brings together knowledge, skills and practical competencies that are required to practice safely and ethically. It is intended that the competency framework be used as a guide throughout the S-LP's career. It is not intended to dictate how a practitioner will prove they are competent in each area nor who they should prove it to. In order to develop the competencies, S-LPs are encouraged to seek out additional education as well as mentorship from practitioners skilled in dysphagia. Members must have accurate and honest assessments of their own abilities and experience to engage in ethical practice.

It is recognized there are significantly different clinical areas in which S-LPs may practise in dysphagia assessment and management.

Some of the competencies will be generic to all clinical areas; however, for some it would be important for these to be detailed for the specific client group. Further supervised practice may be required for additional client groups (e.g., acute care).

Clinical Swallow Assessment

- See Appendix C

Special Populations

- Acute Medical Settings:
  a. Possess knowledge of anatomy and physiology with ability to collect and incorporate medical history into a clinical assessment.
  b. Possess knowledge of clinical assessment procedures and recognize indications for additional instrumental assessment.
  c. Understanding of interventions, and the interplay of chronic and acute conditions and their impact on cognition, speech, language, and swallowing.
  d. Awareness of issues surrounding safe provision of nutrition and medications in an acute care setting.
  e. Ability to adapt to novel and changing situations.

- Intensive Care Units:
  a. Possess knowledge and skills required for providing services in acute medical settings.
  b. Possess advanced knowledge of major body systems, respiratory issues and the inter-relationship with swallowing.

c. Possess understanding of the various respiratory support measures used in an ICU setting- including intubation, tracheostomy and ventilation.
d. Experience with care provision for patients recovering from serious injury or illness.

- Frail Elderly:
  a. Possess knowledge of the interaction of senescence and dysphagia with attention to normal changes in bodily homeostasis that occur with aging and the acceleration of decline observed in frail individuals.
  b. Awareness of the vital importance of compromised functional reserve.
  c. Ability to identify elders who are at risk of the spiral of poor nutrition and frailty as they present themselves in daily clinical practice.[2]
  d. Understand the special issues that relate to geriatric patients and provision of services to individuals residing in Long term care or assisted living facilities.
  e. Knowledge of end-of-life care.

- Neurogenic Impairments:
  a. Possess knowledge of principles of neural recovery when working with patients/clients with neurogenic swallowing impairment.
  b. Knowledge of neuro anatomy.
  c. Knowledge of acute neurogenic conditions, such as stoke or traumatic brain injury, that might result in dysphagia.
  d. Knowledge of progressive neurological conditions that can cause swallowing impairment.

- Altered Anatomy:
  a. Possess knowledge of special procedures required for patients/clients with tracheostomy, congenital facial differences, or altered oropharyngeal anatomy following surgery.
  b. Possess knowledge of implications of chemoradiotherapy to the head and neck, with or without surgical intervention.
  c. Pediatric Cleft Lip and Palate and other congenital facial differences
     i. Possess knowledge of the nature and types of feeding and/or swallowing difficulties that are frequently seen in infants with cleft lip and/or cleft palate.
     ii. Explains the anatomic and physiologic (e.g., pressure-related) reasons for common feeding/swallowing problems in infants with cleft lip/palate and associated craniofacial anomalies (e.g., Pierre Robin sequence).
     iii. Possess knowledge and ability to implement modifications of feeding tools or techniques and or positions to accommodate various treatments,

- Pediatric:
  a. Possess knowledge of both normal and disordered developmental trajectories when working with children with dysphagia.
  b. Possess knowledge of child and caregiver feeding dyad as it relates to breast, bottle and skill development for solids.

b) Risk Management

Dysphagia assessment and management can pose significant risks to patients. For example, given the common physiological pathway of the oropharynx for swallowing and breathing there is risk of airway obstruction or illness related to aspiration. Therefore S-LPs are expected to[3]:

- have satisfactory skills and understanding to deliver emergency assistance to patients who have an airway obstruction (e.g., maintain CPR certification);
- ensure appropriate medical assistance is available when the risk of aspiration and/or choking is extremely high;
- minimize harmful consequences of aspiration that may occur during or after swallowing service delivery;
- ensure patient and caregivers are informed regarding;
    - nature of swallowing problem;
    - risk of aspiration;
    - safe oral hydration and nutrition options;
    - ways to minimize risk for aspiration and pneumonia; and
    - the difference between S-LP provided therapy and swallowing maneuvers versus those that are safe for the family to provide.
- try to maintain patient well-being during completion of swallowing assessment and management sessions (e.g., potential risks and benefits need to be weighed and discussed with the patient and family and consultation with the patient's physician may be required);
- speak with the patient's primary health care provider to clear administration of oral stimuli to those who are to have nothing by mouth (NPO) per medical order;
- assess with stimuli within the limits of the patient's diet (e.g., clear fluids following a gastro-intestinal assessment or allergy restrictions);
- contemplate the risks versus benefits of using specific food or liquid products during swallowing assessments (i.e., Radiographic contrast, food colouring, acidic/thermal stimuli, thickening agents) and management (e.g., ensure diet texture modifications are essential prior to application);
- be familiar with new techniques for assessment and intervention and the clinical support for their use;
- discuss/recommend non-oral nutrition for those patients who are unable to swallow food or liquid safely, or when dysphagia compromises the patient's ability to obtain adequate nutrition orally; and
- have knowledge of infectious disease prevention protocols and proper use of personal protective equipment (PPEs).

APPENDIX A

Glossary of Terms and Abbreviations

Airway Obstruction	A blockage that may partially or totally prevent air from getting into the lungs.
Aspiration/ Aspiration Pneumonia	A lung infection that develops after you **aspirate** (inhale) food, liquid, or vomit into your lungs. You can also aspirate food or liquid from your stomach that backs up into your esophagus.
Choking	Occurs when breathing is impeded by a constricted or obstructed throat or windpipe. In some cases, the air flow is completely blocked, in other cases some amount of air can pass to the lungs.
Client	Refers to the individual receiving professional services and in the case of an individual who is a minor or not capable, the legal guardian or legal representative.
Clinical Swallowing Assessment	Consistent with the WHO (2001) framework, the purpose of assessment is to identify and describe: • typical and atypical parameters of structures and functions affecting swallowing; • effects of swallowing impairments on the individual's activities (capacity and performance in everyday contexts) and participation; and • contextual factors that serve as barriers to or facilitators of successful swallowing and participation for individuals with swallowing impairments. (https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589942550§ion=Assessment)
Competencies (Entry to Practice, Professional)	"**Entry to Practice Competence**" means the minimum abilities required of a S-LP entering practice. "**Professional Competence**" means the ongoing ability to integrate and apply the knowledge, skills and judgement required to provide effective and ethical speech-language pathology and/or audiology services within a designated area of practice.
Congenital	Something that presents at or before birth.
Craniofacial	Medical term that relates to the bones of the skull and face. Craniofacial abnormalities are birth defects of the face or head. Some, like cleft lip and palate, are among the most common of all birth defects.
Dehydration	A harmful reduction in the amount of water in the body
Dysphagia	Used interchangeably in this document with feeding and swallowing. The medical term for swallowing difficulty and refers to impairment of normal deglutition that allows individuals to accept and transport food from the mouth to the stomach in order to acquire nutrition and hydration. It is a complex condition with potentially serious consequences including malnutrition, dehydration, airway obstruction and aspiration pneumonia. It may negatively affect developmental progression in children, quality of life at any age and lead to social isolation and emotional stress on individuals and families.

	Dysphagia in itself is not a disease but a symptom in many illnesses or injuries. It is common in diseases or injuries affecting the brain or nervous system as well as medical conditions resulting in mechanical or structural changes to the face, mouth or oropharynx. Dysphagia may result from conditions that affect normal child development and can occur for various reasons throughout the life span. Any medical situation that affects strength, coordination, respiration and cognitive function might have consequences for the development or maintenance of normal swallowing ability.
End of Life	Used to define the period of time when the death of a terminally ill individual is hours to weeks away.
Feeding	The process involving any aspect of eating or drinking, including gathering and preparing food and liquid for intake, sucking or chewing, and swallowing (Arvedson & Brodsky, 2002).
FEES	A fiberoptic evaluation of swallowing (FEES) test is a procedure used to assess how well you swallow. During the procedure, a thin, flexible instrument is passed through your nose so that parts of your throat can be viewed as you swallow.
ICU	**Intensive care units** (ICUs) are specialist hospital wards that provide treatment and monitoring for people who are very ill. They're staffed with specially trained healthcare professionals and contain sophisticated monitoring equipment. **PICU –** Pediatric Intensive Care Unit. Specializing in the care of critically ill infants, children, and teenagers. **NICU –** Neonatal Intensive Care Unit. Specializing in the care of ill or premature newborn infants.
Intervention	May include restoration of normal swallow function (rehabilitative), modifications to diet consistency and patient behavior (compensatory), or some combination of these two approaches. Compensatory techniques alter the swallow when used but do not create lasting functional change. https://www.asha.org/PRPSpecificTOpic.aspx?folderid=8589942550§ion=Treatment
Malnutrition	Condition that results from eating a diet in which one or more nutrients are either not enough or are too much such that the diet causes health problems.
Management	See Intervention.
MBS	A modified barium swallow (MBS) is a special x-ray to identify why you have trouble swallowing.
Medically Fragile	Someone who, when, due to abuse or neglect, illness, congenital disorder or brain injury, requires medications, treatments and/or specialized care or equipment.
Neural Recovery	Complex medical process which aims to aid recovery from a nervous system injury, and to minimize and/or compensate for any functional alterations resulting from it.
Neural Swallowing Impairment	Neurological conditions that can cause swallowing difficulties are: stroke (the most common cause of dysphagia); traumatic brain injury; cerebral palsy; Parkinson disease and other degenerative neurological disorders such as amyotrophic lateral sclerosis (ALS).

NPO	Also known as nil per os, a Latin phrase that translates literally to English as "nothing through the mouth".
Non-oral Nutrition	Method of receiving nutrition that does not involve the mouth. For example: **Nasogastric Feeding (NG)** - A tube place through the nose, pharynx, and esophagus into the stomach. Food is placed through the tube into the stomach. **Percutaneous endoscopic gastrostomy (PEG)** - Endoscopic medical procedure in which a tube is passed into a patient's stomach through the abdominal wall. Food is placed through the tube into the stomach.
Oropharynx	Middle compartment of the pharynx, i.e. throat; it is the region of the throat between the nasopharynx (top compartment) and hypopharynx (bottom compartment). The oropharynx includes the tonsils, tongue base, soft palate, and pharyngeal walls.
Radiographic Contrast	A group of medical drugs used to improve the visibility of internal organs and structures in X-ray based imaging techniques such as radiography and computed tomography (CT). Barium is the most common type used in dysphagia assessment.
Tracheostomy	A medical procedure — either temporary or permanent — that involves creating an opening in the neck in order to place a tube into a person's windpipe. The tube is inserted through a cut in the neck below the vocal cords. This allows air to enter the lungs.
Treatment	See Intervention.

APPENDIX B

Advanced Practice Guidelines and Other Resources*

Alberta

- Speech-Language Pathologists Restricted Activities Competency Profiles

British Columbia

- Advanced Certificate F: Fiberoptic Endoscopic Evaluation and Management of Swallowing Disorders
- Advanced Certificate H: Communication and Swallowing Assessment and Management for Tracheostomy
- Advanced Certificate I: Videofluoroscopic Assessment of Swallowing Disorders in Adults
- Advanced Certificate J: Videofluoroscopic Assessment of Swallowing Disorders in Paediatrics
- Knowledge and Skills Needed by Speech Language Pathologists Providing Services to Infants and Families in the NICU Environment
  https://www.asha.org/policy/ks2004-00080/
- Knowledge and Skills Needed by Speech Language Pathologists Performing Videofluoroscopic Swallowing Studies
  https://www.asha.org/policy/ks2004-00076/
- Knowledge and Skills Needed by Speech Language Pathologists Performing Endoscopic Assessment of Swallowing Function
  https://www.asha.org/policy/ks2002-00069/
- Knowledge and Skills Needed by Speech Language Pathologists Providing Services to Individuals with Swallowing and/or Feeding Disorders
  https://www.asha.org/policy/ks2002-00079/
- Frequently Asked Questions: Swallowing and Feeding (Dysphagia)
  https://www.asha.org/slp/clinical/dysphagia/dysphagia_faqs/
- Scope of Practice in Speech-Language Pathology
  https://www.asha.org/policy/sp2016-00343/

*This may not be an exhaustive list.

APPENDIX C

Clinical Swallowing Assessment Comptencies[4]

Possess knowledge of normal swallowing anatomy and neurophysiology;

a. Understand the relationship between respiration and swallowing;
b. Possess knowledge of normal feeding skill development;
c. Have the ability to obtain a relevant case history from the patient, caregiver(s), or medical chart;
d. Be able to perform oral mechanism examinations, conduct trial swallows, and recognize clinical signs of aspiration or other swallowing-related difficulties;
e. Possess knowledge and skill in identifying, assessing, and treatment planning around negative feeding behaviours (ex: feeding aversion, delays in feeding development, etc.)
f. Possess skill in evaluating speech functions related to the swallowing mechanism including voice and motor speech function;
g. Know the indications for specific compensatory and rehabilitative management techniques for dysphagia;
h. Possess the ability to develop and maintain constructive, collaborative working relationships with other professionals involved in feeding and swallowing service delivery;
i. Understand the quality-of-life implications of feeding and swallowing disorders, and related ethical issues, and be able to collaborate with the other health care professionals to support patients/clients and families in decision-making regarding nutrition and hydration, non-oral feeding, and end-of-life care;
j. Understand the indications for, and limitations of, using technology and instrumentation in dysphagia assessment and management;
k. Be able to develop clear and effective methods for educating patients/clients and their caregivers regarding selected feeding and swallowing management techniques;
l. Know when to refer patients/clients to other health care professionals, and when to engage other health care professionals in the collaborative care of dysphagia and its sequelae;
m. Stay current with the literature and knowledge regarding best practice and evidence-based practice in dysphagia assessment and management through mechanisms such as journal article reading and discussion, interest group attendance, conference/workshop attendance, or research; and
n. Be able to apply knowledge regarding best practice in dysphagia service delivery to his/her own clinical practice.
o. Knowledge of standard, or institution specific, infection control practices.
p. Possess knowledge of assessment and recommendations regarding basic oral hygiene, including when to make appropriate referrals.

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