PRACTICE STANDARDS AND GUIDELINES FOR ACQUIRED COGNITIVE COMMUNICATION DISORDERS
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A) PREAMBLE

Practice Standards and Guidelines (PSGs) ensure quality care by SLPs to the people of Ontario. This document outlines the standards of practice when providing services to individuals with **Acquired Cognitive Communication Disorders (ACCD).**

The intent of this document is to provide SLPs in Ontario with an overview of the screening, assessment and management process, and many of the competencies necessary to make responsible decisions regarding service delivery. It is not intended to be a tutorial or to provide SLPs with all the information required to provide intervention to this population.

SLPs must have the necessary knowledge, skills, judgement and resources to provide intervention to the individuals they serve. **Code of Ethics 4.2.2** (2011). SLPs are responsible to ensure ongoing competence in all areas of intervention and that any risk of harm is minimized during the provision of services **Code of Ethics 4.2.3** (2011). Where SLPs judge that they do not have the required knowledge, skill and judgement to treat this population, they are expected to consult with and/or refer to SLPs with the required competencies. Experienced SLPs in the area of ACCD are encouraged to share their knowledge by providing mentorship opportunities to less experienced members.

PSGs incorporate both “must” and “should” statements. “Must” statements establish standards that members must always follow. In some cases, “must” statements have been established in legislation and/or CASLPO documents. In other cases, the “must” statements describe standards that are established for the first time in this PSG. “Should” statements describe best practices. To the greatest extent possible, members should follow these best practice guidelines.

The inclusion of a particular recommendation in these standards and guidelines does not necessarily indicate that the practice is supported by high level research evidence (i.e., evidence from randomized clinical trials), but rather that the standard or guideline is grounded in current best evidence derived from a broad review of the research literature (ranging from single case reports to systematic reviews) and/or expert opinion. SLPs should exercise professional judgment, taking into account the environment(s) and the patient’s needs when considering deviating from these standards and guidelines. SLPs must document and be prepared to fully explain departures from the standards in this PSG.
B) DEFINITION OF SERVICE

‘Cognitive Communication Disorders’ is a term used to describe a set of communication features that result from underlying deficits in cognition. Communication difficulties can include issues with hearing, listening, understanding, speaking, reading, writing, conversational interaction and social communication. These disorders may occur as a result of underlying deficits with cognition, that is: attention, orientation, memory, organization, information processing, reasoning, problem solving, executive functions, or self-regulation (ASHA 2005; Ylvisaker & Johnson Greene, 2004; Turkstra et al., 2002; Kennedy et al., 2008). Acquired Cognitive Communication Disorders are distinct from other neurological communication disorders, for example aphasia as a result of stroke (ASHA, 2005; MacDonald & Wiseman-Hakes, 2010).

Etiologies from which Cognitive Communication Disorders may arise include:

1. Congenital etiologies prior to or at birth, e.g. Down Syndrome, cerebral palsy, Autism Spectrum Disorder, Fetal Alcohol Syndrome etc.

2. Acquired etiologies that occur after birth:

   - **progressive neurological disorders** such as dementia, multiple sclerosis, Parkinson’s disease, and Huntington’s disease
   
   - **non-progressive neurological etiologies** including stroke, concussion, traumatic brain injury (TBI), encephalitis, Lyme disease, meningitis, anoxia, hypoxia, aneurysm, tumour, electrocution.
   
   - Other **non-progressive disorders** such as post-traumatic stress disorder (PTSD), depression, conversion disorder, chronic pain etc. (Braden et al., 2010; Cherney et al., 2010; Cornis-Pop et al., 2012; Parrish et al., 2009; Schneider et al., 2009).

This PSG is intended for SLPs who intervene with acquired cognitive communication disorders in both adults and children due to any non-progressive etiologies.

It is common for individuals who have ACCD, to have co-occurring physical disorders (e.g., fatigue and chronic pain) and/or mental health disorders (e.g., PTSD, conversion disorder, social communication issues and/or depression). SLPs intervene with patients experiencing co-occurring disorders in order to address communication activity limitations and participation restrictions as required. (Braden et al., 2010; Cherney et al., 2010; Cornis-Pop et al., 2012; Parrish et al., 2009; Schneider et al., 2009) Interprofessional collaboration with these patients is assumed.

Although this PSG focuses on ACCD, some of the standards and guidelines may apply to patients who present with similar symptoms which arise from different diagnoses.
C) SCOPE OF PRACTICE

The Audiology and Speech-language Pathology Act, 1991 states:

“The practice of speech-language pathology is the assessment of speech and language functions and the treatment and prevention of speech and language dysfunctions or disorders to develop, maintain, rehabilitate or augment oral motor or communicative functions.”

ADDITIONAL DESCRIPTION OF SCOPE OF PRACTICE

The Federation of Health Regulatory Colleges of Ontario (FHRCO) developed an Interprofessional Collaboration (IPC) tool which provides an additional description of scope:

“SLPs work in collaboration with many other professionals, and have the knowledge, skills and judgment to address the prevention, identification, assessment, treatment and (re)habilitation of communication, swallowing, reading and writing delays or disorders in children and adults, as well as assessment and management of individuals requiring alternative and augmentative communication (AAC) systems.

SLPs’ scope of clinical practice includes the provision of assessment, treatment and consultation services for:

- Language delays and disorders
- Speech delays and disorders including apraxia, dysarthria, articulation/phonology and motor speech impairment not otherwise specified
- Communication disorders related to autism, developmental delays, learning disabilities, stroke, brain injuries, cognitive disorders, hearing impairment and progressive neurological diseases
- Literacy
- Dysphagia
- Voice and resonance disorders
- Stuttering
- Alternative and Augmentative communication needs
- Psychogenic communication and swallowing disorders
- Structural anomalies of the speech and voice mechanism”
**D) RESOURCE REQUIREMENTS**

SLPs should ensure that the physical environments are appropriate for all assessment and intervention procedures. Considerations for environmental factors should match the assessment and management goals. Privacy factors should be respected at all times.

<table>
<thead>
<tr>
<th>Standard D.1</th>
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<tbody>
<tr>
<td>SLPs must ensure availability of standardized and non-standardized assessment materials and appropriate equipment for acquired cognitive communication assessment and management.</td>
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</table>

In order to provide effective cognitive communication intervention, SLPs must have access to a variety of age-appropriate standardized and non-standardized cognitive communication assessment tools that have adequate sensitivity and specificity to identify ACCD across all WHO ICF functions (impairment, activity, participation, and the environment). These assessments should examine, in sufficient detail, cognitive communications elements such as: impaired attention, memory, organization, reasoning, inflexibility, impulsivity, impaired information processing (rate, amount and complexity, abstract auditory and visual language etc.) and reduced insight/awareness.

<table>
<thead>
<tr>
<th>Guide D.1</th>
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<tbody>
<tr>
<td>SLPs should ensure that the physical environment is appropriate for screening, assessment and management.</td>
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</table>

Whereas standardized assessments may require a quiet one-on-one setting, some real world assessment and intervention techniques may require the context to be of similar cognitive and communicative complexity to that usually experienced by the individual (i.e. home, work, school and/or community). It is acknowledged that environments for assessment and intervention will be dictated by home, school/education, and workplace limitations, space constraints, time limitations, organizational policies and a number of other factors. If limitations exist, information given by others from multiple environments and contexts should be included.

<table>
<thead>
<tr>
<th>Standard D.2</th>
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<tr>
<td>SLPs must ensure that all equipment (including clinical tools, assessment and therapy materials) is functional and calibrated as required.</td>
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</table>
For some interventions specialized equipment will be necessary. All equipment must be maintained according to manufacturers’ specifications and recommendations. SLPs must ensure that all equipment used is disinfected/sanitized in accordance with the *Infection Prevention and Control Guidelines for Speech-Language Pathology* and calibrated for proper working order, as required in *CAS LPO’s ‘Code of Ethics’ (2011 4.2.9)*.
E) RISK MANAGEMENT DETERMINATION

SLPs must take steps to minimize any risks associated with the intervention. These risks include but may not be limited to:

RISK OF DELAYED OR INAPPROPRIATE INTERVENTION

<table>
<thead>
<tr>
<th>Standard E.1</th>
<th>SLPs must respond to referrals in a timely manner.</th>
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</thead>
</table>

Delayed assessment or management may result in an ACCD not being identified giving rise to communicative complications, maladaptive coping strategies and emotional repercussions that could potentially affect employment, school, family and relationships, social withdrawal and isolation.

Early identification and management of acquired language disorders has been shown to be effective (Maulden, 2005; Robey, 1994).

<table>
<thead>
<tr>
<th>Standard E.2</th>
<th>SLPs must use sufficient and appropriate measures in order to draw accurate assessment conclusions.</th>
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</thead>
</table>

Insufficient and/or inappropriate assessment may result in an ACCD not being identified. If, due to patient's needs, standardized protocols are contraindicated, members must document their rationale and must adapt their recommendations accordingly. Insufficient and/or inappropriate assessment could also result in communicative complications, maladaptive coping strategies and emotional repercussions that could potentially affect employment, school, family and relationships, social withdrawal and isolation.

The risk of identifying a disorder that is not present may result in unnecessary concern for the patient and family.

RISK OF INCREASED STRESS

<table>
<thead>
<tr>
<th>Standard E.3</th>
<th>SLPs must understand the relationship of stress and ACCD to inform their interventions.</th>
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</table>
SLPs must understand the relationship between stress, different communication situations and ACCD. For example, group communication, presentations, testing, telephone communications etc. can initiate or increase stress for the individual. SLPs must take care to minimize stress by understanding the patient’s stressors. The SLP should also help the patient to determine factors that reduce stress (Block et al., 2013; Bloodstein and Bernstein-Ratner, 2007; Alm, 2004). SLPs should, when possible, collaborate with professionals who assess and manage psychosocial issues beyond an SLP’s scope of practice.

RISK OF ASSOCIATING SUCCESSFUL COMMUNICATION WITH THE CLINICAL ENVIRONMENT

SLPs must work to increase the patient’s communication independence.

PATIENT AND MEMBER SAFETY

Members must endeavor to maintain patient and member safety at all times.

Occasionally, patients may display aggressive, self-injurious behavior, agitation, poor impulse control and/or inappropriate social behaviour. Consequently, patient safety, as well as member safety, is an important consideration. Members should ensure they have strategies and resources to manage the behaviours, when needed.

Resources, such as the Workplace Violence and Harassment: Understanding the Law (2010) Guide from the Ministry of Labour provides definitions of violence and threatening behaviours and outlines the member’s responsibilities and rights under the Occupational Health and Safety Act (1990).
F) INTERVENTION: COMPETENCIES AND PROCEDURES

The following is an overview of Cognitive Communication intervention, which includes these components of care:

1. Screening
2. Assessment
3. Management
4. Discharge planning
5. Advocacy

Speech-language pathology services may be required at all stages of care. The entry point to care will vary depending on the etiology and the circumstances surrounding the onset of injury or illness. Given the complexity of brain injuries and variability of identification of cognitive communication disorders, SLPs may provide intervention at any stage across the continuum of recovery.

Central to the intervention is the involvement of the patient and pursuing a patient-centred approach. The nature of an acquired communication disorder is defined by the WHO ICF (WHO 2001), in part, by limitations in activity and participation, and is influenced by environmental factors and the patient’s personal characteristics. These factors must be considered in all aspects of service delivery. SLP intervention must be evidence based and customized to the specific needs of the patient, ensuring that language, cultural and personal considerations are respected.

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SLPs must ensure that they have the required competencies for ACCD intervention.

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SLPs must ensure that they have the required competencies and practice within their area of competence “as determined by their education, training and professional experience” (Code of Ethics - 2011). SLPs should refer the patient to other professionals regarding issues outside of the speech-language pathology scope of practice. Further details are available in the Scope of Practice section of this PSG.

1. SCREENING: COMPETENCIES AND PROCEDURES
Screening is a process where a member applies certain measures that are designed to identify patients who may have a hearing, balance, communication, swallowing or similar disorder[s], for the sole purpose of determining the patient’s need for a speech-language pathology assessment, an audiological assessment, or both. This does not include:

- Inadvertently noticing possible hearing, balance, communication, swallowing or similar disorder[s], or
- Considering information that is shared about an individual’s possible hearing, balance, communication, swallowing or similar disorder[s], for the purpose of providing general educational information and/or recommending a referral for a speech-language pathology screening or assessment, an audiological screening or assessment, or both.

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<th>Standard F.2</th>
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<tbody>
<tr>
<td>SLPs must have the knowledge, skills and judgement to select, develop, administer and interpret appropriate screening measures.</td>
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The purpose of screening is to identify the need for a comprehensive assessment. However, patients with mild ACCD may not realize the full impact of their deficits until they face the complexities of communication activities associated with daily life including work and academics. To overcome the risk of missing signs of cognitive communication disorders during a screening process, patients may have to be re-screened at a later date, or collateral interviewing and/or corroborating evidence should be sought. It is also important to emphasize that self-reports of intact communication need to be verified throughout the recovery process, as insight into communication difficulties is commonly impaired.

**SCREENING COMPETENCIES**

SLPs demonstrate the following competencies:

- Knowledge of the environmental factors that may affect patients’ screening results, and be aware that patients may require intervention at a future date as their environment changes.
- Knowledge of roles and responsibilities of other professionals who are involved in early identification of cognitive, speech, language and swallowing disorders.
- Knowledge and skill to recognize and mitigate the potential of screening protocols to ‘pass’ patients when a cognitive communication disorder exists.
- Knowledge and skills required to supervise support personnel (if applicable) as outlined in the position statement on [Use of Support Personnel by Speech Language Pathologists](#):
  a) Ability to train and supervise support personnel involved in screening.
  b) Know when it is appropriate to use support personnel with screening.
2. ASSESSMENT: COMPETENCIES AND PROCEDURES

SLPs must have the knowledge, skills and judgement to select, develop, administer and interpret appropriate assessment measures.

ASSESSMENT COMPETENCIES

SLPs demonstrate the following knowledge, skills and judgement:

- Normal and abnormal development, neuroanatomy, brain-behaviour relationships, pathophysiology, and neuropsychological processes as related to the assessment of the cognitive aspects of communication.

- When it is inappropriate to proceed with an assessment. For example, when pain, fatigue or mental health issues would significantly affect the accuracy of assessment results.

- To design an appropriate assessment protocol dependent on the purpose of the assessment. For example, diagnosis, prognosis, acquisition of services, treatment, re-integration to community, work or school, monitoring, discharge planning, measuring outcomes, research, legal testimony, or establishing future care costs.

- To select and implement clinically, culturally, and linguistically appropriate approaches to assessment, using standardized, non-standardized and contextually relevant procedures that assess impairment, activities and participation and contextual (personal and environmental) factors (WHO ICF).

- To interpret results of assessment procedures including background information in order to identify the presence, nature and functional implications of ACCDs, including the stage of recovery and a description of strengths and challenges and how the WHO ICF functions are impacted.

- To identify contextual factors that contribute to or can be used to ameliorate ACCD.

- To communicate the results of an assessment, the characteristics of ACCDs and their impact, the current theories regarding etiology and the possible management options.

- To identify when cognitive communication assessments should be provided as the patient comes to realize the impact of their difficulties on daily communication functioning. This should occur throughout the continuum of care.
ASSESSMENT PROCEDURES

The WHO’s ICF recommends an assessment at the levels of impairment, activity limitations, participation restrictions and environmental barriers. Therefore, in addition to impairment level standardized testing in structured clinical and hospital environments, clinicians evaluate the functional impact of an individual’s cognitive-communication difficulties on their performance in daily life activities and their participation in meaningful roles within society (social participation, parenting, work, school, etc.).

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<tr>
<th>Standard</th>
<th>F.4</th>
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<tbody>
<tr>
<td>SLPs must sample and/or survey a broad variety of communication situations, complexities and environments before coming to a conclusion regarding the presence or absence of ACCD.</td>
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Given the variable nature of ACCD, the SLP must make reasonable efforts to sample and/or survey a variety of communication situations, complexities and/or environments, (e.g., different communication partners, time of day and locations) prior to determining whether an ACCD exists, or the type and severity of the ACCD. When varied sampling or surveying is not possible, the SLP must comment on the possibility of deficits or difficulties in the unexplored contexts of the patient’s life.

CASE HISTORY

<table>
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<th>Standard</th>
<th>F.5</th>
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<tr>
<td>SLPs must include a case history as part of the assessment protocol.</td>
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The SLP must review the documentation relating to pertinent health, social, vocational and educational history as well as previous rehabilitation history.

The case history may include, but is not limited to:

- Accurate description of the initial injury
- Summaries of relevant imaging and medical reports
- Severity indicators
- Cognitive and behavioural presentation post injury
- Medical diagnoses
- Medication
- Relevant pre-injury history including medical and psychological diagnoses that would impact on cognitive-communication functioning, handedness, vision, and hearing
- Rehabilitation assessment, treatment or progress reports
- Social and communicative history including languages spoken, read and written, social networks, pre-injury communication style, literacy skills, etc.
- Work history
- Educational history
- Family/peer and support systems
- Post-injury progress

**AREAS OF ASSESSMENT**

<table>
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<th>Standard F.6</th>
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<tr>
<td>SLPs must consider the use of standardized and non-standardized assessments/surveys in the assessment protocol.</td>
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</table>

Given the limitations of standardized tests in detecting subtle cognitive-communication deficits, it is important to include protocols that evaluate contextualized communication. Specific areas of assessment should include but will not be limited to the following:

- Attention and Concentration - including the ability to maintain focus with and without distractions, and the ability to shift and divide attention appropriately
- Orientation - person, place and time
- Verbal Memory and New Learning - ability to process verbal information in all phases of verbal memory (short-term, working, long-term: retention and retrieval, episodic, semantic/declarative, procedural and prospective, text and auditory), and ability to apply linguistic concepts for new learning
- Linguistic Organization - categorization, association, sequencing, identification of salient features
- Auditory Comprehension and Information Processing - amount, rate, complexity, efficiency
- Hearing and vision
- Oral Expression and Discourse - word finding, word usage, sentence structure, organizing ideas in conversation
- Reading Comprehension and Reading Rate - word, paragraph, text, and educational and vocational reading relevant to demands
- Written Expression - word, paragraph, discourse, text, educational and vocational writing relevant to demands
- Social Communication and Pragmatics - conversation, topic introduction, topic maintenance, topic choice, turn taking, social perception and perspective taking
- Reasoning and Problem Solving Processes
• Executive Functions and Metacognitive Processes - goal setting, planning, initiation, monitoring, time management, impulse control
• Insight, awareness and adjustment to disability
• Speech - articulation, fluency, voice, prosody, timing, resonance
• Nonverbal Communication - facial expression, tone of voice, eye contact, body language, proxemics
• Consideration of visual, perceptual, hearing, pain, fatigue and other physical difficulties
• Performance in different communication contexts
• Communication partners needs and abilities to provide communication supports and strategies.

ASSESSMENT RECOMMENDATIONS
Recommendations should not only take into account impairments and stage of recovery, but also activity limitations, participation restrictions and environmental barriers (WHO 2001).

<table>
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<tr>
<th>Guide</th>
<th>SLPs should provide counselling, following assessment, to the patient and/or others on the impact of ACCD.</th>
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Consider patient, caregiver and/or family counselling to address the nature of the ACCD, your assessment results, recommended follow-up plan, and possible outcomes of the intervention and the impact of ACCD. Counselling may take many forms and will be dependent on the situation and environment.

3. MANAGEMENT: COMPETENCIES AND PROCEDURES

The WHO ICF uses the terms: impairment, participation and activity to refer to different dimensions of an individual’s ability. SLPs design functional and meaningful management programs for the treatment of cognitive-communication disorders by addressing all three levels of ability – often simultaneously.

MANAGEMENT COMPETENCIES

SLPs demonstrate the following knowledge, skills and judgement:
• To formulate a clinically, culturally, and linguistically appropriate and evidence-based management program for ACCD. This includes, but is not limited to:
- Knowledge of appropriate treatment techniques and procedures and the benefits and risks of each.
- An understanding of the cognitive communication demands and strategies of the patient’s activities of daily living, social relationships and academic, vocational and community settings.
- Knowledge of the principles of transfer/generalization and maintenance of learned skills.
- The ability to identify internal factors that may influence the patient’s cognitive communication.

- To develop a management plan according to patient’s stage of recovery from coma, acute rehabilitation, to discharge home. The management plan for discharge to home may include community reintegration, return to school, work, and full life participation.
- To evaluate a treatment program. This includes, but is not limited to:
  - Objectively assessing the efficacy of treatment on a continuous basis, including input from the patient, SDM and communication partners.
  - Applying necessary modifications to the treatment program to reflect the unique needs of patients.
- Applying necessary modifications to treatment program to reflect the cognitive communication demands of the academic, vocational and community settings.
- To collaborate with members when working in a multidisciplinary team in devising and implementing management plans.
- To refer to appropriate services, for example, other SLP services (voice, augmentative communication, swallowing etc.) or other professionals (physicians, audiologists and/or vision specialists, psychologists, occupational therapists etc).
- To counsel and develop the skills of family, support personnel and other communication partners. This includes, but is not limited to:
  - Knowing how and when to incorporate, supervise and evaluate support personnel (when applicable) according to the Position Statement on Use of Support Personnel by Speech Language Pathologists.
  - Knowing how to assist others in facilitating the patient’s generalization of gains made during intervention.
  - Providing communication partner training, caregiver communication training, counselling and behavioral support services.
  - Knowing the community resources in order to facilitate referral to self-help groups (when appropriate).
- To provide consulting services. This includes but is not limited to:
  - Family and significant others
  - Healthcare team members
  - School, college and university staff such as, teachers, guidance counsellors, resource staff, special needs support personnel etc.
  - Persons involved with return to work such as, employers, lawyers, disability insurers,
o residential staff such as, nurses, personal support workers, LTC staff, centres for individuals with ABI, rehab support workers

o Justice System – police, lawyers and courts

- To serve as case manager, service coordinator, or team leader, if required, by coordinating, monitoring, and ensuring the appropriate and timely delivery of a comprehensive management plan.

MANAGEMENT PROCEDURES

Management procedures include all of the activities employed to address the ACCD. These include direct and indirect treatment, education, counselling and reintegration.

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<th>Standard</th>
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<tr>
<td>SLPs must have a rationale for the chosen ACCD patient centered intervention plan including criteria to begin and end.</td>
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’Management’ is the generic term encompassing all recommendations or techniques applied with the intention of optimizing a patient’s cognitive communication. SLPs must develop a management plan for each patient according to assessment results, including the case history.

There is a broad spectrum of management procedures. The SLP must use a clinical rationale for his or her intervention of choice that encompasses age, type and severity of the ACCD and its impact on the patient. The SLP also needs to establish criteria to begin and end intervention.

The patient should be given the opportunity to play an active role in setting individually appropriate management goals in partnership with the SLP.

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<th>Standard</th>
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<td>SLPs must provide an ACCD management program that is individualized to the patient’s needs.</td>
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Management is highly individualized and depends on many factors, including: the person’s strengths and challenges, the severity and nature of injury, pre-injury variables, the individual’s level of insight and motivation, the type and degree of support from significant others, the individual’s awareness, goals, current medical/physical condition, psychological/emotional status, cultural/sociological factors, the demands of work, school, home and community environments, daily activities, and other environmental factors.
SLPs should provide opportunities to rehearse communication skills in situations appropriate to the context in which the patient lives, works, studies and/or socializes.

The primary goal of management is to facilitate the maximum return to full life participation. Evidence to date favours management approaches that are individualized, functional, goal and outcome oriented, patient-centred, and grounded in the contexts of real life communications and cognitive demands. Intervention should take place in a variety of environments and should provide opportunities for rehearsal of communication skills (Togher et al., 2014).

**TREATMENT and/or CONSULTATION**

Treatment can be both direct and indirect, and can include:

- Improving or restoring cognitive-communication functions
- Assisting with a gradual reintegration to daily functions and productive activities that require cognitive-communication skills (e.g. return to work, school, community interactions, volunteering)
- Modification of the communication environment (home, school, community, or work)
- Training communications partners and improve communication environments and settings
- Assisting with adjustment to impairments, coping strategies, confidence, and self-esteem

SLPs must consider compensatory strategies in the management of ACCDs.

‘Compensatory strategies’ are procedures designed to allow an individual to perform a task despite the presence of the cognitive-communication impairment. These strategies include:

- Environmental modifications (e.g. altering the setting, and training communication partners)
- Internal strategies (repeating a phrase to verify understanding, and/or using a well-learned self-regulatory method such as ‘goal-plan-do-review’)
- External aids (e.g. checklists, smart phone scheduling applications, etc.)
PATIENT EDUCATION

SLPs must provide information to the patient and/or caregiver regarding the nature of the ACCD and how it relates to the assessment, recommendations and management plan.

Education and information is provided to the patient regarding the specific nature of their cognitive and communication disorders (impairments, limitations and prognosis) and the role of compensatory strategies and other interventions. Education and awareness training involves tailoring the content and delivery method to the individual’s functional status and readiness to achieve the desired outcomes.

Education of the patient’s family and caregivers regarding the nature of the ACCD, and the results of assessment and recommendations is an essential component of the management plan. The education provided must be explained in terms that are easily understood.

All rehabilitation programs require that specific information, concepts, and skills be taught to the individual patient. SLPs have training in instructional techniques and communication methods to promote new learning. Instructional principles include: a task analysis of the instructional content, modeling, errorless learning and spaced retrieval approaches, the use of probes to assess learning prior to each teaching intervention, careful integration of old and new information, and the use of meta-cognitive strategies.

COMMUNICATION PARTNER TRAINING

Communication Partner Training is provided to any person with whom the individual routinely communicates whenever possible and appropriate (Togher et al. 2014). The content of this training typically includes information regarding the individual’s specific cognitive-communication impairments, strategies tailored to the individual’s needs, and practice in implementing these strategies (Togher et al. 2005).

COUNSELLING

SLPs should provide counselling to the patient and/or others on the impact of ACCD.

Patients, caregivers and/or family may require ongoing counselling as they come to terms with the communication and cognitive impacts of the ACCD. Counselling is focused on assisting the individual to adjust to the acquired communication disability and its impact on life. Counselling may take many forms and will be dependent on the situation and environment.
Members should refer to appropriate healthcare professionals when psychosocial issues extend beyond the specific ACCD, the SLP’s scope of practice or the SLP’s knowledge and skills. **Psychotherapy is not within the SLP’s scope of practice.**

**REINTEGRATION TO HOME/WORK/SCHOOL/COMMUNITY**

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<th>Standard</th>
<th>F.11</th>
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<td>SLPs must develop strategies that consider the patient’s return to participation in the environment in which they communicate (home, work, school and community).</td>
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</table>

Successful community reintegration is the primary goal of the rehabilitation program, and should be considered as part of treatment planning as soon as possible. The impact of cognitive-communication disorders on interpersonal relationships, roles, and activities is complex and multi-faceted. Often, ongoing supports and strategies are required throughout life transitions. The focus should be on meaningful life participation across the lifespan. The SLP can lead, guide, collaborate and/or consult regarding interventions in the community reintegration process.

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<th>Standard</th>
<th>F.12</th>
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<tr>
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<td>SLPs must provide information on additional services if the SLP is unable to provide them.</td>
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Information given to the patient should include recommendations for future speech-language pathology management and services, and where these might be offered if the SLP is unable to provide them.

**PREVENTION**

**PREVENTION COMPETENCIES**

- SLPs demonstrate knowledge, skill, judgement and awareness of prevention and secondary prevention factors contributing to ACCD, and communicate these factors to patients and the public.

**4. DISCHARGE PLANNING**

**DISCHARGE PLANNING COMPETENCIES**
SLPs demonstrate the following competencies:

- The ability to determine the need for, and arrange appropriate follow-up at discharge.
- Knowledge of additional available services that may be appropriate.

Discharge planning serves to direct interventions toward an appropriate and timely discharge from ACCD intervention. Ideally, the SLP and the patient determine the appropriate time and conditions of discharge. Typically, the discharge occurs when the patient has reached optimal communication in a variety of settings. However, this is not always achievable with all patients at all points in time. Therefore, discharge planning may include directing the patient to other support resources.

Members should research publically funded and private community resources to recommend to the patient and family if appropriate. These resources can serve to support a patient’s reintegration.

5. ADVOCACY

ADVOCACY COMPETENCIES

SLPs must use their knowledge and skills to advance the health and well-being of their patients during intervention and at discharge.

Patients may need members to help them navigate the healthcare, education, vocational systems and access appropriate resources in a timely manner.
SLPs must educate other professionals and support staff across the continuum of care to understand the unique communication needs of this population, identify ACCDs, and make referrals to speech-language pathology.
G) GLOSSARY AND COMMON TERMINOLOGY

ACQUIRED BRAIN INJURY
Injuries to the brain that are not congenital, do not occur as part of the developmental process, have a rapid onset related to sudden trauma or disease process and are non-progressive in that degeneration is not part of the symptomology. Acquired brain injuries include the following: traumatic brain injury, stroke, meningitis, encephalitis, non-progressive brain tumours, or anoxia.

ACQUIRED COGNITIVE COMMUNICATION DISORDER
A communication disorder that results from underlying deficits in cognition caused by an acquired, non-progressive etiology.

ADVOCACY
The act or process of recommending and/or supporting a course of action or proposal for an individual patient.

ANOXIA
A total lack of oxygen supply to the tissues.

ASSESSMENT
The use of both standardized and non-standardized measures to observe and record a person’s functioning in a variety of areas. This is done in order to gain an understanding of a patient’s strengths and weaknesses so as to allow the SLP to make a diagnostic statement and plan a treatment program.

ATTENTION/CONCENTRATION
The ability to focus attention on a given task or set of stimuli for an appropriate period of time.

ATTENTION, DIVIDED
The ability to attend to two or more stimuli or activities simultaneously.

ATTENTION, SELECTIVE
The ability to focus attention on a particular action/task or train of thought to the exclusion of others.

ATTENTION, SUSTAINED
The ability to focus attention on a particular task or train of thought over an extended period of time.

APHASIA
An acquired language disorder caused by damage to the brain in the language areas, usually in the left hemisphere. Aphasia can affect all modes of expressive and receptive language including speaking, writing, reading, and understanding spoken language.

APRAXIA
A neurogenic communication disorder affecting the motor programming system for speech production.
CASE MANAGER
A person who facilitates a patient’s access to appropriate medical, rehabilitation and support programs and coordinates the delivery of these services.

COGNITION
The mental activity by which humans acquire, process, store, and act on information from the environment. This involves processes as such as perceiving, remembering, reasoning, judging, and problem solving.

COGNITIVE-COMMUNICATION DISORDERS
A set of communication features that result from underlying deficits in cognition due to a wide range of aetiologies.

COMA
A state of extreme unresponsiveness in which an individual exhibits no voluntary movement or behavior.

COMPENSATORY STRATEGIES
Strategies used to help individuals overcome the impact of their disabilities.

COMPUTED AXIAL TOMOGRAPHY (CT) SCAN
A series of computer assisted X-rays taken at different levels of the brain that allows the direct visualization of the skull and intracranial structures.

COUNSELLING
Activities and behaviours that educate and support patients and their families who experience emotional distress related to a communication disorder. Counselling activities may include measures that systematically reduce anxiety related to specific speaking situations, or helping a patient accept their communication diagnosis.

The assessment and treatment of cognitive, emotional or behavioural disturbances by psychotherapeutic means is outside an Audiologist’s and SLP’s scope of practice.

DYSARTHRIA
A speech disorder resulting from a neurological etiology that gives rise to weakness ranging to paralysis of the speech musculature.

EVIDENCE BASED PRACTICE
Applying the best available, most recent research results in conjunction with clinical knowledge to meet the speech-language pathology needs of a patient.

EXECUTIVE FUNCTIONS
The ability to plan, sequence, self-monitor, self-correct, inhibit, initiate, control alter or assign priority to behaviour. Studies have associated executive functions with the prefrontal cortex.

FUNCTIONAL INTEGRATIVE PERFORMANCE
The ability of an individual to perform in a variety of real world environments.

GOALS
The objective(s) that the SLP and patient develop during the course of therapy. Long-Term Goals are set as the end point of intervention and may take up to several years and different forms of treatment to attain.
**Short-Term Goals** are the more immediate objectives of the current intervention program that can be achieved in a limited period of time. Different short-term goals lead to the achievement of a long-term goal.

**HYPOXIA**
The reduction of oxygen supply to tissue below physiological levels despite adequate perfusion of tissues with blood.

**INDIVIDUAL EDUCATION PLAN (IEP)**
A document that is created by the school and the parents to identify a student's special educational needs and ways of fulfilling those needs within the school program.

**INSIGHT**
The extent to which a person is able to accurately judge his/her own situation, strengths and limitations.

**INFORMATION PROCESSING**
The stages (perception, encoding, and memory) sensory data must pass through in order to be understood.

**INTERPROFESSIONAL TEAM**
A group of professionals from diverse fields who work in a coordinated fashion toward a common goal for the patient.

**INTERNATIONAL CLASSIFICATION OF FUNCTIONING AND DISABILITY (ICF-2)**
ICF is a classification system first issued by the World Health Organization in 1980. Its three-part structure is used world-wide as both a scientific model of disability and the basis for a common language for clinical use, data collection, and research. In 1995, WHO began a consensus-based process that lead to a revised classification system issued in 2001, entitled ICF-2.

**LANGUAGE**
The organized system of vocal, gestural and written symbols with which humans communicate thoughts, ideas, or emotions.

**LEARNING**
A change in a person’s understanding or behaviour due to experience or practice.

**MEMORY**
The process of organizing and storing mental representations.

- **Sensory memory**: A very brief stage in which perceptual (visual, auditory) information is registered.
- **Short term memory**: perceptual information is retained and coded so that it can pass into long-term memory
- **Working memory**: similar to short-term memory, but with an added emphasis on active processing of information both from sensory memory and long-term memory.
- **Long-term memory**: information is transferred into permanent storage for future recall. Information may be divided into three categories: episodic (events), semantic (facts/concepts), and procedural (methods/skills).
MAGNETIC RESONANCE IMAGING (MRI)
The use of magnetic resonance to visualize internal organs of the human body, including the brain, and obtain diagnostic information.

METACOGNITION
The awareness of one’s own cognitive processes in learning and understanding; insight into accurately judging one's own cognitive strengths and limitations. Metacognitive assessment and intervention methods address cognitive strategies, executive functions, and self-regulation in an integrated framework (Kennedy & Coelho, 2005).

MILD BRAIN INJURY
Mild brain injury is suspected where there is one or more of the following: Rapid acceleration/deceleration or rotational injury, amnesia for the events surrounding the injury, period of confusion at time of injury, scalp and/or other facial injuries, post-traumatic amnesia, cognitive-behavioural changes post injury or the individual may have negative CT scan but still have an acquired brain injury.

MULTIDISCIPLINARY TEAM
An approach to care where professionals from various disciplines set goals for evaluation and treatment based on professional expertise in conjunction with other team members.

NONVERBAL COMMUNICATION
The use of nonverbal behaviours such as facial expression, eye contact, touch, gesture and body movement to convey a message.

ONTARIO STUDENT RECORD/OSR
The record of a student's educational progress through the elementary and secondary school system in Ontario mandated by the Ontario Education Act.

PATIENT-CENTRED CARE
The active participation of a patient in negotiating treatment goals with the SLP. Throughout the intervention process, the SLP enables the patient to make informed decisions and adapts treatment to meet the patient’s needs and choices.

PRAGMATICS
Rules underlying an individual’s functional use of language in a specific social context.

PROBLEM-SOLVING
An individual’s ability to use cognitive processes when trying to accomplish a task.

PROGNOSIS
The prospect for recovery from a disease or injury as indicated by the symptoms of the individual as well as a variety of other factors, such as nature of injury and co-existing conditions.

PROXEMICS
The study of spatial territory and personal space.

PSYCHOGENIC COMMUNICATION AND SWALLOWING DISORDERS
Communication and/or swallowing disorders originating in the mind, or from mental or emotional conflict.
SCREENING

a process where a member applies certain measures that are designed to identify patients who may have a hearing, balance, communication, swallowing or similar disorder[s], for the sole purpose of determining the patient’s need for a speech-language pathology assessment, an audiological assessment, or both.

This does not include:

- Inadvertently noticing possible hearing, balance, communication, swallowing or similar disorder[s], or
- Considering information that is shared about an individual’s possible hearing, balance, communication, swallowing or similar disorder[s], for the purpose of providing general educational information and/or recommending a referral for a speech-language pathology screening or assessment, an audiological screening or assessment, or both.

SOCIAL COMMUNICATION

The occurrence of communication in natural settings. The modification of communication based on interaction with others. Requires the processing of both verbal and nonverbal input from the environment, and retention of what has occurred earlier in the interaction.

SINGLE-PHOTON EMISSION COMPUTERIZED TOMOGRAPHY (SPECT) - Scanning involving the rotation of detectors around a patient, which acquires information on the concentration of radionuclides, introduced to the patient's body to visualize brain anatomy and function.

SUBSTITUTE DECISIONS ACT - The Substitute Decisions Act, 1995 is the law in Ontario concerning continuing power of attorney for property and the power of attorney for personal care.

TRAUMATIC BRAIN INJURY - A brain injury resulting from external physical damage or wound, such as a blow to the head.

VISUAL PERCEPTION

A person’s ability to recognize and discriminate between visual stimuli and to interpret these stimuli through association with earlier experiences.
H) FREQUENTLY ASKED QUESTIONS

Q: What is our role with semi-comatose patients?
A: Regardless of the patient’s state of consciousness, the SLP screens and/or assesses the patient and uses their knowledge, skill and judgement to determine whether it is appropriate to initiate a program of care. The SLP works collaboratively with the family and other healthcare professionals providing information and education on the importance of communication and stimulation as well as support.

Q: If another regulated health professional has completed an assessment on attention, memory, executive functioning etc., can the SLP interpret those results as it pertains to communication and form recommendations?
A: It is recommended to use your professional judgment. When was the assessment administered, under what circumstances and by whom? If the information is applicable, you may choose to interpret another health professional’s assessment results and use the information to help develop a plan of care, or you may choose to administer your own assessment protocol. When reporting the results make it clear that you are drawing from test results you did not administer.

Q: When should we use support personnel? There are situations that are unique to providing service to patients with ACCDs that would contraindicate the use of support personnel. However, the use of support personnel can help the patient form a relationship with another person so that SLP can become more "arm’s length" and thereby reduce the patient's dependence on one therapist.
A: The patient is referred to you, the regulated health professional, and you are accountable for all aspects of intervention Code of Ethics, Position Statement on the Use of Support Personnel. Use your professional judgment to determine if it is appropriate for your patient to receive services from the support personnel you supervise. There may be many factors that contraindicate the use of support personnel, for example, patient behaviour issues. Nevertheless, support personnel can be beneficial members of the patientcare team to help reduce dependence on the SLP and to carry over communication goals.

Q: Why is this PSG specific to non-progressive ACCDs, only? Most of what is contained is generic enough to also apply to progressive ACCDs.
A: This PSG was developed specifically for SLps providing service to patients with acquired cognitive communication disorders. Many, but not all, of the standards will apply to other patient populations, and can be used by members to guide their intervention. However, members must be aware that the evidence used to develop some of the standards and guides was obtained from current practice standards in the area of non-progressive cognitive communication disorders and from this specific field of research.
Q: Can you provide specific examples of standardized and non-standardized tests?
A: The purpose of Practice Standards and Guidelines is to outline member competencies and determine standards of practice which all members must follow when intervening with a particular patient population. PSGs are not intended to serve as resource guides for specific assessments, tests and/or management approaches. Current information regarding standardized tests and their effectiveness can be found in the Cognitive Communication research literature.

Q: Comments about timeliness of SLP intervention made within the document are highly relative and are not in keeping with constraints of the OHIP funded rehabilitation system. Can you be more specific? What is "timely"? 2 weeks, 1 month, etc.?
A: ‘Timely manner’ is a relative term and is determined by your service delivery model and/or workplace environment. When you have the opportunity you must use your clinical judgement regarding prioritization of assessments and caseload. Members should advocate for services or processes which reduce waiting times and/or increase service for patients with ACCD.

Q: Regarding evaluating capacity, I think this should be left to the social worker (SW) to do and not the SLP. If the patient rejects the results of the capacity evaluation, then the SLP would have to contact the Consent and Capacity Board, and is that really our job?
A: The Health Care Consent Act, (1996) outlines those regulated health professions who can evaluate a patient’s capacity to consent to treatment and consent to placement in Long Term Care and to receive care from a Personal Support Worker in the patient’s home. SLPs are included in the list of capacity evaluators and are expected to carry out an evaluation if they have reason to believe that the patient does not have the ability to understand relevant information concerning treatment or placement or the ability to appreciate the reasonably foreseeable consequences of a decision. CASLPO’s Consent and Capacity E-Learning Module (found in the Member’s Portal) outlines the process of capacity evaluation. There are other external educational resources available as well.

If a patient wishes to appeal a finding of lack of capacity to consent, then the SLP must advocate on behalf of the patient, especially if they have a communication barrier, and help them to contact the Consent and Capacity Board to arrange an appeal hearing.

Q: As a Private Practice SLP, I am wondering how to fully comply with standards regarding case history documentation since I would not be able to access MRI results and other hospital records.
A: SLPs should use their judgment regarding adequate case history information. If you decide that there is a significant gap in the information provided, you should make reasonable efforts to obtain the information from the appropriate person, e.g., family physician, other health professionals, case manager, lawyer, etc. Remember to obtain the patient’s consent to collect and use information from people outside of the Circle of Care.
Q: “SLPs must make reasonable efforts to sample and/or survey a variety of communication situations, complexities and/or environments, (e.g., different communication partners, time of day and locations) ...” this might be difficult in an in-patient hospital environment.

A: SLPs are expected to make reasonable efforts to sample a variety of communication situations. It is understood that some clinical environments are more limiting than others in this regard. However, members should consider all possible methods for evaluating the patient in a variety of situations. For example, in acute care, you might consider observing the patient communicating with nursing staff or with staff in the physiotherapy gym. If the patient is mobile, either by wheelchair or walking, you may take the patient to the café/snack bar in order to evaluate communication in that setting. Creating communication situations using the telephone is another option.

Surveying is an important means of gathering information. Family, visitors as well as healthcare staff can be surveyed regarding the patient’s previous and current communication.

Q: Many individuals seen for assessment and treatment are being funded by WSIB, or fall under a Statutory Accident Benefits Schedule and related legislation. Shouldn’t SLPs be familiar with this information if they are to act as a resource and provide informed choices about the intervention throughout the continuum of care?

A. If you regularly provide service to patients who access third party funding, you should become knowledgeable about the different systems patients and families can access to help fund assessment and treatment services. As an SLP, you may assist patients in understanding processes related to funding applications, especially if they have comprehension and information processing deficits. However, you must refer to the appropriate professional if the patient and/or family ask for financial advice.
I) REFERENCES AND BIBLIOGRAPHY


Workplace Violence and Harassment: Understanding the Law (2010), Ontario Ministry of Labour


