Stroke Core Competency Framework

Background:

The Canadian Stroke Best Practice Recommendations (CSBPR) provide a framework of evidence-based recommendations for healthcare providers working with persons with stroke. Stroke competencies among clinicians, reflective of the best practice guidelines, are a cornerstone of effective stroke care. The Provincial Interprofessional Stroke Core Competency Framework was developed in 2016 and reviewed and rebranded as the Stroke Core Competency Framework (SCCF) in 2022 for all healthcare providers working in Ontario. The provincial SCCF was adapted for use within the Toronto Stroke Networks and includes 24 competencies in stroke care.

Purpose:

The SCCF is intended to provide all healthcare providers with an accessible, comprehensive self-assessment tool that will help identify specific learning objectives to support stroke best practice implementation.

Target Population:

The SCCF can be used by both new and experienced healthcare providers working across the continuum of stroke care.

How to use the Stroke Core Competency Framework:

1. Rate your level of expertise using Benner's Stages of Clinical Competence.
2. Identify areas for improvement and develop a professional learning plan *(a learning plan template is available at the end of each competency)*.
3. Seek professional development opportunities to inform and fulfill professional learning plans.
4. Leadership may use learning plans to support professional development reviews.
5. Leadership may collate results to inform organizational priorities for stroke care that can be integrated into strategic planning.

**Steps 4 and 5 require organizational support and collaboration

Version: June 11, 2025

Competency	Novice	Advanced Beginner	Competent	Proficient	Expert	Not applicable	Learning outcomes The numbered learning outcomes are for everyone working in stroke care. The bulleted learning outcomes are for persons who either assess, manage, or make recommendations within this specific competency.
1.0 Introduction to Stroke Care							1. Describe the role of the Ontario stroke system of care and your local Regional Stroke Network
							2. Apply the CSBPR resources to guide and inform practice
							3. Demonstrate respect for cultural differences and values when working with persons with stroke, caregivers, and families
							4. Describe the roles and scope of practice of the disciplines that are part of the dedicated stroke team involved in stroke care across the continuum
							5. Recognize the value of interprofessional collaboration in providing stroke care across the continuum
							6. Define stroke rehabilitation and understand how your role can optimize physical, cognitive, emotional, communicative, and social recovery
							7. Identify the vision for Integrated Stroke Care in the region and the role that each part of the continuum plays in meeting that vision
Identified Learning Need:							
2.0 Brain Anatomy and Physiology							1. List the anatomical structures of the brain
							2. Describe the functions of each major area of the brain
							3. Identify the major arteries of the cerebrovascular circulation
							4. Describe how neuroplasticity affects stroke recovery
Identified Learning Need:							
3.0 Stroke Pathophysiology							1. Explain the pathophysiology of ischemic and hemorrhagic stroke
							2. Describe the etiologies of ischemic and hemorrhagic stroke
							3. Describe clinical impairments associated with major stroke syndromes
Identified Learning Need:							

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4.0 Hyperacute Stroke Care							1. Describe the role of Emergency Medical Services (EMS) in the management of acute stroke
							2. Recognize signs of stroke and how to respond appropriately based on your role
							3. Explain the importance of timely assessment and tools to promote rapid identification of an acute stroke
							4. Explain care processes for Transient Ischemic Attack (TIA) management in the emergency department
							5. Describe hyperacute stroke therapies (i.e., thrombolysis, endovascular thrombectomy)
							6. Identify stroke complications during the hyperacute phase (i.e., orolingual angioedema, hemorrhage after thrombolysis, change in level of consciousness)
							7. Describe interventions to prevent and manage hyperacute stroke complications (i.e., orolingual angioedema, hemorrhage after thrombolysis, change in level of consciousness)
	For those who assess, manage, or make recommendations within hyperacute stroke care						
							• Select and complete the most appropriate neurological assessment(s) (e.g., large vessel occlusion screening, National Institutes of Health Stroke Scale, Canadian Neurological Scale, Glasgow Coma Scale)
							• Interpret assessment results and implement the appropriate interventions for management of hyperacute stroke care
							• Manage hyperacute stroke care and associated complications (i.e., orolingual angioedema, hemorrhagic transformation, and systematic hemorrhage after thrombolysis)
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							

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5.0 Ischemic and Intracerebral Hemorrhage Stroke Care							1. Describe acute stroke care assessment and management for ischemic and intracerebral hemorrhagic strokes
							2. Describe the diagnostic tests used to support stroke diagnosis and treatment
							3. Identify possible post-stroke complications during the acute phase (i.e., Venous thromboembolism, hyper/hypoglycemia, infection such as UTI or pneumonia, seizures, increased intracranial pressure)
							4. Describe interventions to prevent and manage complications (i.e., urinary tract infection, aspiration pneumonia, and venous thromboembolism)
Identified Learning Need:							
6.0 Dysphagia							1. Explain dysphagia and the purpose of dysphagia screening using a validated screening tool prior to initiating oral intake
							2. Describe signs and symptoms of swallowing difficulties and associated complications
							3. Demonstrate proper positioning and setup for safe feeding (e.g., visual/perceptual deficits, motor weakness, pocketing)
	For those who assess and recommend interventions and/or strategies to manage dysphagia						
							• Explain the connection between dysphagia deficits and location of the stroke
							• Select and complete the most appropriate assessment(s) for dysphagia (i.e., bedside assessment, Videofluoroscopic Swallow Study, Fiberoptic Endoscopic Evaluation of Swallowing)
							• Interpret assessment results and provide appropriate recommendations (e.g., diet modification, postural adjustments, safe swallow/therapeutic swallow strategies, oral motor exercises and swallow rehabilitation exercises)

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							• Manage dysphagia and their associated complications (i.e., aspiration pneumonia, nutrition, hydration)
							• Explain the factors to consider when making decisions regarding tube feeding, transitioning from NG to PEG, transition from tube to oral intake
							• Effectively communicate the recommendations to the persons with stroke, families/caregivers, and the interprofessional team. Make appropriate referrals to ENT, GI, etc.
Identified Learning Need:							
7.0 Nutrition and Hydration							1. Describe the importance of screening for nutrition and hydration
							2. Screen for malnutrition using a validated screening tool, know when to re-assess and refer to a Registered Dietician
							3. Describe the various diets, textures, and alternative feeding methods (e.g., tube feeding, TPN)
							4. Demonstrate proper positioning and setup for safe feeding (e.g., visual/perceptual deficits, motor weakness, pocketing)
							5. Describe the sequelae of malnutrition
							6. Identify persons with stroke at risk for malnutrition (e.g., poor intake, dysphagia)
	For those who assess and recommend interventions and/or strategies to manage nutrition and hydration						
							• Select and complete the most appropriate assessment(s) for nutrition and hydration
							• Interpret assessment results and identify and/or implement appropriate recommendations
							• Effectively communicate the recommendations to the persons with stroke, families/caregivers, and the interprofessional team. Make appropriate referrals to Registered Dietitian.
Identified Learning Need:							

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8.0 Oral Care							1. Identify sequelae of poor oral care and prevention strategies
							2. Screen oral health and perform oral care according to your organizational protocol or SLP recommendations
Identified Learning Need:							
9.0 Activity Post-Stroke and Safe Patient Handling							1. Explain the role of the interprofessional team in supporting activity and mobilization
							2. Describe the importance of early activity and mobilization in stroke recovery
							3. Describe how muscle tone, posture, balance, muscle weakness/motor loss, sensory loss and fatigue can affect function and safe patient handling
							4. Demonstrate proper techniques for handling, positioning, and transferring (e.g., hemiplegic extremities, skin integrity, injury prevention)
							5. Demonstrate proper use of appropriate equipment or devices to facilitate activity and safe handling (e.g., slings, gait aids, lifts)
							6. Identify contraindications to activity and mobilization
							7. Identify fall prevention strategies
	For those who assess and recommend interventions and/or strategies to improve activity post-stroke and safe patient handling						
							• Describe best practice recommendations for the upper and lower extremity, gait training, balance, and mobility
							• Select and complete the most appropriate assessment(s) to evaluate function and safety (e.g., tone, posture, balance, muscle weakness/motor loss, sensory loss, and fatigue)
							• Interpret assessment results and identify and implement appropriate treatment/management recommendations (e.g., task specific goals, equipment, devices, techniques to promote activity, function, and safety)

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							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
10.0 Changes in Communication							1. Explain the implications of communication impairments on participation and engagement in therapy and activities
							2. Demonstrate strategies to improve or assist with communication when interacting with those who have communication deficits (e.g., utilize Supported Conversations for Persons with Aphasia (SCA™) to assist with participation in conversation, following instructions, and informed decision making.
							3. Describe the impact of the environment on communication and provide strategies to maximize successful communicative interactions
							For those who assess and recommend interventions and/or strategies to improve communication:
							• Select and complete the most appropriate screening tool and evaluate results to determine next steps
							• Select and complete the most appropriate validated assessment(s)
							• Interpret assessment results and implement appropriate recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
11.0 Changes in Cognition							1. Identify common cognitive changes post-stroke
							2. Describe the impact of cognitive changes on function
							3. Understand the relationship between mood and cognitive changes post-stroke

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							4. Understand the impact of the environment on cognitive function post-stroke
							5. Demonstrate strategies to optimize participation in functional activities when cognitive deficits exist
	For those who assess and recommend interventions and/or strategies to improve and/or support changes in cognition						
							• Describe the clinical consideration for screening and assessing cognitive impairment
							• Select and complete the most appropriate assessment(s)
							• Interpret assessment results, identify/implement appropriate treatment recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
12.0 Changes in Vision and Perception							1. Identify common visual and perceptual changes post-stroke
							2. Describe the impact of visual and perceptual changes on function
							3. Understand the impact of the environment on visual-perceptual function
							4. Demonstrate strategies and interventions to optimize participation in functional activities when visual and perceptual deficits exist
	For those who assess and recommend interventions and/or strategies to support changes in vision and perception:						
							• Select and complete the most appropriate assessment(s) for visual-perceptual function
							• Interpret assessment results, identify/implement appropriate treatment recommendations

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							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team (i.e., optometry, neuro-ophthalmology)
Identified Learning Need:							
13.0 Sensorimotor Recovery							1. Demonstrate strategies and interventions to optimize motor and sensory function
	For those who assess sensorimotor function and recommend interventions and/or strategies to support sensorimotor recovery:						
							• Select and complete the most appropriate assessment(s) to enable sensorimotor recovery
							• Interpret assessment results, identify/implement appropriate treatment recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
14.0 Fatigue and Changes in Mood and Behaviour							1. Describe post-stroke fatigue and provide strategies for self-management
							2. Describe common mood changes post-stroke and identify the warning signs of post-stroke depression, anxiety, and apathy
							3. Identify changes in mood and make appropriate referrals for screening with a validated tool
							4. Identify how stroke impacts behavior, emotions, actions and/or reactions
							5. Recognize the role hope plays in recovery and the value of fostering hope
							6. Demonstrate strategies and interventions to manage the person's mood and behaviors

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							For those who assess and recommend interventions and/or strategies to manage fatigue and changes in mood and behaviour:
							• Select and complete the most appropriate assessment(s)
							• Interpret assessment results, identify/implement appropriate treatment recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
15.0 Changes in Physical Function							1. Identify physical changes that can occur post-stroke
							2. Describe the physical impacts of stroke on activities of daily living
							3. Understand the impact of the environment on physical function
							4. Demonstrate strategies and interventions that optimize recovery (e.g., remediation and compensatory strategies)
							For those who assess and recommend strategies and/or interventions to improve functional engagement in activities of daily living following stroke:
							• Select and complete the most appropriate assessment(s)
							• Interpret assessment results, identify/implement appropriate treatment recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
16.0 Maintaining/Promoting Continence							1. Explain the loss of bladder (urinary retention and/or incontinence) and bowel control (fecal incontinence and/or constipation) and the impact on the care needs of the person with stroke

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							2. Describe risk factors for urinary incontinence/retention and fecal incontinence/constipation
							3. Apply tools and strategies to support toileting and continence
		For those who assess and recommend strategies and/or interventions to promote bowel and bladder control:
							• Select and complete the most appropriate assessment to determine bladder and bowel function
							• Interpret assessment results, identify/implement appropriate treatment recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:		
17.0 Prevention and Management of Post-Stroke Pain and Spasticity							1. Describe complications seen in the hemiplegic arm
							2. Explain how altered tone affects persons with stroke
							3. Identify persons with stroke most at risk of developing spasticity
							4. Identify common types of post-stroke pain and describe recommended interventions
							5. Apply strategies to protect the hemiplegic arm and prevent injury
							6. Apply recommended positioning techniques, interventions, and tools to minimize pain and spasticity
		For those who recommend interventions and strategies for the prevention and management of post-stroke spasticity:
							• Select and complete the most appropriate assessment(s)
							• Interpret assessment results, identify/implement appropriate treatment/management recommendations
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team

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18.0 Stroke Prevention							1. Identify the warning signs of stroke and transient ischemic attack
							2. Identify and provide examples of the modifiable and non-modifiable risk factors for stroke
							3. Identify modifiable risk factor management strategies for the reduction of secondary or recurrent stroke
							4. Utilize education resources available to support teaching on secondary prevention
							5. Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
19.0 Transitions and Community Reintegration							1. Develop individualized care plans with persons with stroke and their families that are person-centered and culturally appropriate
							2. Provide comprehensive and relevant information in a timely manner to ensure seamless transitions and continuity of care
							3. Describe the process for accessing post-acute stroke rehabilitation services
							4. Identify the impacts of transitions on persons living with stroke and understand how to prepare for transitions between care
							5. Identify available transitional/discharge resources and services for post-stroke care and recovery relevant to your areas of practice
							6. Describe the impact of stroke on the caregiver and family members post-stroke
							7. Identify virtual care resources to support stroke care where appropriate
	For those who support transitions and recommend or refer to community supports:						
							• Gather the most relevant information to enable a warm handover

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							• Remain knowledgeable about the current resources and supports available (e.g., community stroke rehabilitation programs) including their inclusion/exclusion criteria and referral processes
							• Foster relationships with partners across the continuum to better support smooth transitions and community reintegration
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
20.0 Participation in Social and Life Roles							1. Summarize the impact of participating in social and life roles post-stroke including: a. Sexuality
							b. Relationships
							c. Vocation
							d. Leisure activities
							e. Driving
							2. Screen for the impact on participation in social and life roles and make appropriate referrals
	For those who recommend interventions and strategies to resume participation in social and life roles:						
							• Select and complete the most appropriate assessment(s)
							• Interpret assessment results, identify/implement appropriate treatment/management recommendations
							• Demonstrate communication skills and knowledge to address physical, emotional, and cognitive impact on social and life roles
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							

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21.0 Advanced Care Planning							1. Recognize when to reassess goals of care (i.e., change in a patient's health status)
	For those who support advanced care planning:						
							• Describe information on advanced care planning
							• Demonstrate communication skills and knowledge to address physical, spiritual, cultural, psychological, ethical, and social needs when participating in advanced care planning discussions
							• Effectively communicate the recommendations and appropriate referrals, services, and resources to the persons with stroke, families/caregivers, and the interprofessional team
Identified Learning Need:							
22.0 Palliative and End-of-Life Care							1. Describe the key content to be addressed to support comfort and quality of life (e.g., life sustaining measures, nutrition and hydration, oral care, pain, delirium, anxiety, and depression etc.)
							2. Demonstrate a palliative approach to care to support basic symptom management and basic psychosocial care needs
							3. Identify when a palliative and end-of-life discussion is warranted
	For those who support palliative and end-of-life care discussions:						
							• Demonstrate communication skills and knowledge to address physical, spiritual, cultural, psychological, ethical, and social needs when participating in palliative and end of life care planning discussions
							• Recognize when to reassess goals of care for palliative care
Identified Learning Need:							

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23.0 Patient, Family, Caregiver Education							1. Conduct an assessment of individualized learning needs and goals through the stages of care in collaboration with the person with stroke and the interprofessional team
							2. Develop individualized education plan based on the assessment of learning needs and goals (i.e., all relevant aspects of stroke care and recovery)
							3. Identify strategies to promote self-management (e.g., motivational interviewing, brief action planning, teach-back)
							4. Identify appropriate ways to communicate and support retention of information to the persons with stroke, families/caregivers and the interprofessional team (e.g., documentation, aphasia friendly)
Identified Learning Need:							
24.0 Reporting and Performance							1. Demonstrate accurate documentation of stroke-specific data elements.
							2. Recognize how stroke data is used for both program planning and system development.
Identified Learning Need:							