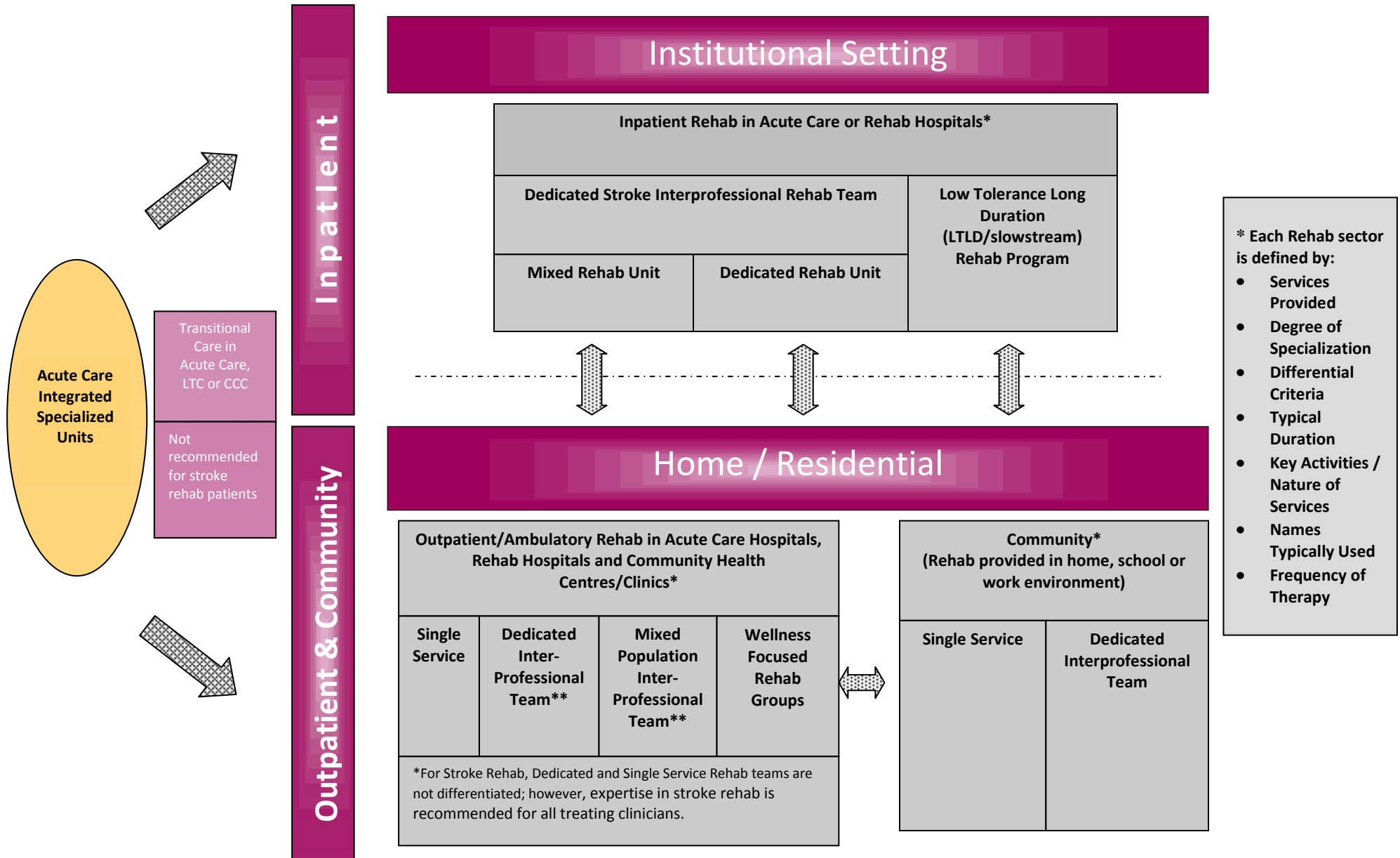


Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals



GUIDING PRINCIPLES

Objectives:

I. Increase clarity and consistency in the forms of cognitive and physical rehab across the continuum by:

1. Clarifying the distinctions between and across institutional and community-based rehab programs.
2. Classifying programs with consistent terminology.
3. Describing the key features of institutional and community-based rehabilitation programs based on the services provided, the degree of specialization, differential/critical criteria, duration, and the primary focus of the rehab program/service.

II. Inform planning and performance measurement through the development of standards for rehab program components against which rehab programs can be benchmarked.

Guiding Principles:

1. The Rehab Definitions Conceptual Framework presupposes the World Health Organization's definition of "rehabilitation" as "*a progressive, dynamic, goal-oriented and often time-limited process, which enables an individual with an impairment to identify and reach his/her optimal mental, physical, cognitive and/or social functional level. Rehabilitation provides opportunities for the individual, the family and the community to accommodate a limitation or loss of function and aims to facilitate social integration and independence.*"
2. The Rehab Definitions Conceptual Framework refers to cognitive and physical forms of rehabilitation across the continuum of care (including Acquired Brain Injury behavioural programs and geriatric psychiatry). The rehab conceptual diagram refers to acute care, inpatient rehab programs within institutional settings and outpatient and community-based rehab for clients residing at home or in a residential setting. The use of bi-directional arrows in the schematic reflects the flow of patients and continuity of care across these settings.
3. The framework identifies key features of rehab programs based on evidence-based practices where available to define the "gold standard" of rehab care (e.g. rehab beds are clustered together). In most instances these key features reflect current practices; however, some organizations may be required to implement changes within their organizations to achieve consistency with the criteria set out in the framework.
4. The term "patient" is used for individuals receiving rehabilitation in a hospital setting. The term "client" is used to refer to individuals receiving community rehab services.

5. The Rehab Definitions Conceptual Framework uses categories that have been defined based on the rehab needs of the patient and the typical services provided. Length of stay or the type of facility in which the rehab is provided is not considered essential to defining rehab sectors.
6. The Rehab Definitions Conceptual Framework is based on the assumption that clients participating in the programs described have rehab potential and rehab goals. For criteria regarding rehab potential, medical stability and rehab readiness for inpatient rehab, refer to the GTA Rehab Network's Inpatient Rehab Referral Guidelines (www.gtarehabnetwork.ca).
7. The framework uses terminology that is consistent with the MOHTLC guidelines for inpatient rehabilitation beds and can be applied to community and ambulatory service delivery.
8. While it is appreciated that much of rehabilitation occurs in third-party payer assessment centres or private clinics, the framework refers to publicly-funded rehabilitation. However, it is hoped that the framework will promote consistency in standards of care and equitable access across all rehab programs.
9. Input from healthcare providers representing acute care, regional rehab centres and community-based organizations that provide adult (including geriatric) and paediatric rehab has been obtained to validate the Rehab Definitions Conceptual Framework.
10. In light of the ongoing research and newly emerging evidence in the area of stroke rehabilitation, the definitions for stroke rehabilitation will be reviewed every three years.

GLOSSARY OF REHAB COMPONENT TERMS

Core Team: Core team refers to the team members who are essential, actively involved in the assessment and treatment (if required) of rehab patients on the unit and who participate regularly in team rounds.

Dedicated Interprofessional Team (Community): Rehab provided in the home, school or work environment by an interprofessional team using a coordinated, integrated approach for specific rehab populations or to reduce the impact of a particular disability.

Dedicated Interprofessional Team (Outpatient/Ambulatory Rehab): Outpatient rehab provided by an interprofessional team with expertise in the treatment and assessment of a particular patient population. Outpatient/Ambulatory dedicated interprofessional teams are located in acute care hospitals, rehab hospitals and community health centres/clinics. They provide rehab to patients who require more than one rehab service and a coordinated rehab approach.

Dedicated Rehab Unit: An inpatient rehab unit located in acute care and rehab hospitals that serves a single patient population group and provides intensive rehabilitation. Some units may specialize in more than one diagnosis in related populations (e.g. Cardio/Respiratory, Orthopaedic/Amputation, etc.). A dedicated rehab unit is suitable for individuals who require 24-hour hospital care and who are in need of an interprofessional rehab program using a coordinated rehab approach.

Low Tolerance Long Duration (LTLD/slowstream) Rehab Program: Suitable for individuals in need of an interprofessional rehab approach to address specific rehab goals who also have chronic/complex conditions requiring 24-hour hospital care and who are expected to benefit from a slower-paced rehab program for a longer duration than is offered in dedicated or mixed rehab programs. LTLD rehab is most commonly delivered in a complex continuing care bed but may also be provided in a designated rehab bed. LTLD rehab programs may be located in acute care, rehab or complex continuing care hospitals.

Mixed Population Interprofessional Team (Outpatient/Ambulatory Rehab): Outpatient rehab provided by an interprofessional team, which typically assesses and treats patients from a variety of patient population groups. Outpatient/Ambulatory mixed population interprofessional teams are located in acute care hospitals, rehab hospitals and community health centres/clinics. They provide rehab to patients who require more than one rehab service and a coordinated rehab approach.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

Mixed Rehab Unit: Formerly referred to as a General inpatient rehab unit, this type of unit is located in acute care and rehab hospitals, provides intensive rehabilitation and serves a variety of patient population groups. The mixed rehab unit is suitable for individuals who require 24-hour hospital care and are in need of an interprofessional rehab program using a coordinated approach.

Single Service (Community): Individual rehab services that are usually provided through Community Care Access Centres. Single rehab services are suitable for individuals who are in need of one or more rehabilitation services in single specialty area(s)/profession(s) provided in the home, school or work environment. Although clients may receive more than one service, a coordinated approach is not used as rehab providers typically work as individual providers. However, some communication with other health providers may occur on an as-needed basis.

Single Service (Outpatient/Ambulatory Rehab): An outpatient rehab service located in acute care hospitals, rehab hospitals and community health centres/clinics that is suitable for individuals who are in need of an outpatient rehabilitation service in a single specialty area/profession. Clients may receive more than one rehab service; however, the services are not provided by way of a coordinated rehab approach. Services may include assessment only or assessment and treatment. Services may be provided during a one-time visit or multiple visits.

Wellness Focused Rehab Groups: These groups are provided in an outpatient/ambulatory setting and led by an individual rehab provider or team or rehab specialists to enhance an individual's ability to cope with a particular disability or impairment. These time-limited groups are publicly-funded although a small fee may be charged for materials.

GUIDING PRINCIPLES

Objectives:

I. Increase clarity and consistency in the forms of cognitive and physical rehab across the continuum by:

1. Clarifying the distinctions between and across institutional and community-based rehab programs.
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II. Inform planning and performance measurement through the development of standards for rehab program components against which rehab programs can be benchmarked.

Guiding Principles:

1. The Rehab Definitions Conceptual Framework presupposes the World Health Organization's definition of "rehabilitation" as *"a progressive, dynamic, goal-oriented and often time-limited process, which enables an individual with an impairment to identify and reach his/her optimal mental, physical, cognitive and/or social functional level. Rehabilitation provides opportunities for the individual, the family and the community to accommodate a limitation or loss of function and aims to facilitate social integration and independence."*
2. The Rehab Definitions Conceptual Framework refers to cognitive and physical forms of rehabilitation across the continuum of care (including Acquired Brain Injury behavioural programs and geriatric psychiatry). The rehab conceptual diagram refers to acute care, inpatient rehab programs within institutional settings and outpatient and community-based rehab for clients residing at home or in a residential setting. The use of bi-directional arrows in the schematic reflects the flow of patients and continuity of care across these settings.
3. The framework identifies key features of rehab programs based on evidence-based practices where available to define the "gold standard" of rehab care (e.g. rehab beds are clustered together). In most instances these key features reflect current practices; however, some organizations may be required to implement changes within their organizations to achieve consistency with the criteria set out in the framework.
4. The term "patient" is used for individuals receiving rehabilitation in a hospital setting. The term "client" is used to refer to individuals receiving community rehab services.

5. The Rehab Definitions Conceptual Framework uses categories that have been defined based on the rehab needs of the patient and the typical services provided. Length of stay or the type of facility in which the rehab is provided is not considered essential to defining rehab sectors.
6. The Rehab Definitions Conceptual Framework is based on the assumption that clients participating in the programs described have rehab potential and rehab goals. For criteria regarding rehab potential, medical stability and rehab readiness for inpatient rehab, refer to the GTA Rehab Network's Inpatient Rehab Referral Guidelines (www.gtarehabnetwork.ca).
7. The framework uses terminology that is consistent with the MOHTLC guidelines for inpatient rehabilitation beds and can be applied to community and ambulatory service delivery.
8. While it is appreciated that much of rehabilitation occurs in third-party payer assessment centres or private clinics, the framework refers to publicly-funded rehabilitation. However, it is hoped that the framework will promote consistency in standards of care and equitable access across all rehab programs.
9. Input from healthcare providers representing acute care, regional rehab centres and community-based organizations that provide adult (including geriatric) and paediatric rehab has been obtained to validate the Rehab Definitions Conceptual Framework.
10. In light of the ongoing research and newly emerging evidence in the area of stroke rehabilitation, the definitions for stroke rehabilitation will be reviewed every two - three years.

GLOSSARY OF REHAB COMPONENT TERMS

Dedicated Interprofessional Team (Community): Rehab provided in the home, school or work environment by an interprofessional team using a coordinated, integrated approach for specific rehab populations or to reduce the impact of a particular disability.

Dedicated Interprofessional Team (Outpatient/Ambulatory Rehab): Outpatient rehab provided by an interprofessional team with expertise in the treatment and assessment of a particular patient population. Outpatient/Ambulatory dedicated interprofessional teams are located in acute care hospitals, rehab hospitals and community health centres/clinics. They provide rehab to patients who require more than one rehab service and a coordinated rehab approach.

Dedicated Rehab Unit: An inpatient rehab unit located in acute care and rehab hospitals that serves a single patient population group and provides intensive rehabilitation. Some units may specialize in more than one diagnosis in related populations (e.g. Cardio/Respiratory, Orthopaedic/Amputation, etc.). A dedicated rehab unit is suitable for individuals who require 24-hour hospital care and who are in need of an interprofessional rehab program using a coordinated rehab approach.

Low Tolerance Long Duration (LTLD/slowstream) Rehab: Located in acute care and rehab hospitals, LTLD rehab is suitable for individuals in need of an interprofessional rehab program who may also have a chronic/complex condition requiring 24-hour hospital care over an extended period of time and who are expected to benefit from a slower-paced rehab program for a longer duration than is offered in dedicated or mixed rehab units.

Mixed Population Interprofessional Team (Outpatient/Ambulatory Rehab): Outpatient rehab provided by an interprofessional team, which typically assesses and treats patients from a variety of patient population groups. Outpatient/Ambulatory mixed population interprofessional teams are located in acute care hospitals, rehab hospitals and community health centres/clinics. They provide rehab to patients who require more than one rehab service and a coordinated rehab approach.

Mixed Rehab Unit: Formerly referred to as a General inpatient rehab unit, this type of unit is located in acute care and rehab hospitals, provides intensive rehabilitation and serves a variety of patient population groups. The mixed rehab unit is suitable for individuals who require 24-hour hospital care and are in need of an interprofessional rehab program using a coordinated approach.

Single Service (Community): Individual rehab services that are usually provided through Community Care Access Centres. Single rehab services are suitable for individuals who are in need of one or more rehabilitation services in single specialty area(s)/profession(s) provided in the home, school or work environment. Although clients may receive more than one service, a coordinated approach is not used as rehab providers typically work as individual providers. However, some communication with other health providers may occur on an as-needed basis.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

Single Service (Outpatient/Ambulatory Rehab): An outpatient rehab service located in acute care hospitals, rehab hospitals and community health centres/clinics that is suitable for individuals who are in need of an outpatient rehabilitation service in a single specialty area/profession. Clients may receive more than one rehab service; however, the services are not provided by way of a coordinated rehab approach. Services may include assessment only or assessment and treatment. Services may be provided during a one-time visit or multiple visits.

Wellness Focused Rehab Groups: These groups are provided in an outpatient/ambulatory setting and led by an individual rehab provider or team or rehab specialists to enhance an individual's ability to cope with a particular disability or impairment. These time-limited groups are publicly-funded although a small fee may be charged for materials.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

ACUTE CARE	
Integrated Stroke Units	
Names Typically Used	Stroke unit; Integrated Stroke unit; Comprehensive Stroke Service.
Services Provided	Physician diagnostic work-up, Physiotherapy (PT), Occupational Therapy (OT), Speech Language Pathology (SLP), Social Work (SW), Clinical Dietician, Nurse (RN), Clinician/Case coordinators. Additional disciplines may include Pharmacy, (Neuro)psychology and Therapeutic Recreation. ¹
Specialization vs. Non-Specialization	Specialized stroke care. Healthcare professionals to have expertise in stroke care. (See Footnote ¹)
Differentiating Criteria	Acute stroke onset (usually ischemic).
Typical Duration	10 – 14 days or until no longer in need of acute medical services.
Key Activities / Nature of Service	<ul style="list-style-type: none"> • Prevention of complications of stroke. • Focussed interprofessional assessment to determine breadth of deficits and rehab intensity required, preferably within the first 24-48 hours.² • Initiate rehab intervention as soon as possible and provide rehab to the extent that it is needed and the patient is able to tolerate. • Patients, who are not initially considered to be eligible for inpatient stroke rehab, will be reassessed regularly for rehab readiness and their rehab needs.³ • Education to patient and family regarding stroke, signs & symptoms, impairments & their impact/management, planning & decision making, risk factors, resources and the stroke care system.⁴ • Initiation of appropriate secondary prevention and rehab referral to inpatient or outpatient/community-based rehab as is appropriate.^{5 6} • Stroke-specific wellness interventions that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing. Secondary prevention may be offered.

TRANSITIONAL CARE In Acute Care, CCC or Long Term Care

NOT APPROPRIATE FOR PATIENTS WHO HAVE SUFFERED A RECENT, ACUTE STROKE AND WHO ARE DEEMED APPROPRIATE FOR INPATIENT REHAB. PATIENTS TO BE TRANSFERRED DIRECTLY FROM ACUTE CARE TO INPATIENT REHAB UNIT. ^{7 8}

¹ Clinical expertise is defined as “the proficiency and judgment that clinicians acquire through clinical experience and clinical practice.” (*British Medical Journal* 1996; 312:71-2) Clinicians rely on their expertise to balance the patient’s clinical state and circumstances, evidence-based research and patient preferences in their clinical decision-making and provision of treatment. (*Evidence-Based Medicine* 2002; 7:36-38). Rehab providers must carry a caseload of stroke patients on a regular basis to develop/maintain clinical skills to address problems with visual perception, communication, mobility, cognition and/or other impairments.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

INPATIENT STROKE REHAB			
Dedicated Stroke Team/Service in Inpatient Mixed Rehab Units in Acute Care and Rehab Hospitals	Dedicated Stroke Inpatient Unit in Acute Care and Rehab Hospitals	Low Tolerance Long Duration Stroke (LTLD/slowstream) Inpatient Rehab in CCC and Rehab Hospitals	
Suitable for individuals in need of an interprofessional rehab team/service who also require 24-hour hospital care.	Suitable for individuals in need of an interprofessional rehab team/service and who also require 24-hour hospital care.	Suitable for individuals in need of an interprofessional rehab team/service who may also have a chronic/complex condition requiring 24-hour hospital care over an extended period of time and who are expected to benefit from low intensity, long duration rehab.	
Please refer to the GTA Rehab Network's <i>Inpatient Rehab Referral Guidelines</i> regarding the criteria for rehab candidacy, medical stability and rehab readiness. ⁹ Inpatient stroke rehabilitation services should be available within 2 business days from the time of referral. ¹⁰ All stroke rehab patients require a dedicated team with expertise in stroke rehab. ¹¹ The dedicated team may be located within a mixed unit or on a dedicated stroke unit. Ideally, stroke rehab interventions are individualized to meet the specific rehab needs of each stroke survivor. ¹²			
Names Typically Used	<ul style="list-style-type: none"> • General Rehabilitation or Medical Rehabilitation, Neuro Rehab 	<ul style="list-style-type: none"> • Inpatient Stroke Rehabilitation Program. 	<ul style="list-style-type: none"> • LTLD rehab; Slow-Stream; Neuroactivation.
Services Provided	<ul style="list-style-type: none"> • Intensive rehabilitation of a minimum of 1 hour each of PT, OT, SLP per day x 5 days per week as tolerated by patient¹³ (SLP as indicated). This may include OTA/PTA services under the guidance of OT/PT; however no more than half of the therapy time should be provided by an OTA/PTA. • Staffing ratios should support, at minimum, the amount of therapy recommended.² • Nurses will participate in the therapeutic process outside of formal therapy time. • Patients have the opportunity to participate in as much therapy as is appropriate to their needs and as they are able and willing to 	<ul style="list-style-type: none"> • Intensive rehabilitation of a minimum of 1 hour each of PT, OT, SLP per day x 5 days per week as tolerated by patient.¹⁷ (SLP as indicated). This may include OTA/PTA services under the guidance of OT/PT; however no more than half of the therapy time should be provided by an OTA/PTA. • Staffing ratios should support, at minimum, the amount of therapy recommended Error! Bookmark not defined. • Nurses will participate in the therapeutic process outside of formal therapy time. • Patients have the opportunity to participate in as much therapy as is appropriate to their needs and as they are able and willing to tolerate.¹⁸ 	<ul style="list-style-type: none"> • Low to moderately intensive rehabilitation of a minimum of 1 hour of therapeutic activity (including activities with nursing and allied health) as tolerated by patient. • Expectation is that patients will receive a minimum of 1 hour total therapeutic activity per day, 3-5 days per week.²¹ This may include OTA/PTA services under the guidance of OT/PT; however no more than half of the therapy time should be provided by an OTA/PTA. • Staffing ratios should support, at minimum, the amount of therapy recommended Error! Bookmark not defined. • Nurses will participate in the therapeutic process outside of formal therapy time. • Patients have the opportunity to participate in as much

² Currently, there is no evidence-based literature to support the amount of staffing required.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

INPATIENT STROKE REHAB			
Dedicated Stroke Team/Service in Inpatient Mixed Rehab Units in Acute Care and Rehab Hospitals		Dedicated Stroke Inpatient Unit in Acute Care and Rehab Hospitals	Low Tolerance Long Duration Stroke (LTLD/slowstream) Inpatient Rehab in CCC and Rehab Hospitals
	<p>tolerate.¹⁴</p> <ul style="list-style-type: none"> • A dedicated interprofessional team with expertise (See Footnote³) in stroke rehab. • Core team has competency in stroke care and typically includes: Physician, Nursing, Physiotherapy, Occupational Therapy, Social Work, Pharmacy, Speech-Language Pathology, Clinical Dietician, Therapeutic Recreation and Chaplaincy/ Pastoral Care. • Staffing ratios should support the minimum amount of therapy recommended.¹⁵ • Access to consultation from Neuropsychology, Neurology, Geriatrician, Psychiatry. • Services include screening for cognitive function, depression/mood, swallowing, behavioural issues and falls. • Inpatient stroke rehabilitation services should be available within 2 business days from the time of referral.¹⁶ 	<ul style="list-style-type: none"> • A dedicated interprofessional team with expertise in stroke rehab. (See Footnote²) • Core team has competency in stroke care and typically includes: Physician, Nursing, Physiotherapy, Occupational Therapy, Social Work, Pharmacy, Speech-Language Pathology, Clinical Dietician, Therapeutic Recreation and Chaplaincy/ Pastoral Care • Staffing ratios should support the minimum amount of therapy recommended.¹⁹ • Access to consultation from Neuropsychology, Neurology, Geriatrician, Psychiatry. • Services include screening for cognitive function, depression/mood, swallowing, behavioural issues and falls. • Inpatient stroke rehabilitation services should be available within 2 business days from the time of referral.²⁰ 	<p>therapeutic activity as is appropriate to their needs and as they are able and willing to tolerate.²²</p> <ul style="list-style-type: none"> • A dedicated interprofessional team with expertise in stroke rehab. (See Footnote²) • Core team has competency in stroke care and typically includes: Physician, Nursing, Physiotherapy, Occupational Therapy, Social Work, Pharmacy Consultation Speech-Language Pathology, Clinical Dietician, Therapeutic Recreation, Chaplaincy/Pastoral Care • Staffing ratios should support the minimum amount of therapy recommended.²³ • Access to consultation from Neuropsychology, Neurology, Geriatrician, and Psychiatry is preferred. • Services include screening for cognitive function, depression/mood, swallowing, behavioural issues and falls. • Inpatient stroke rehabilitation services should be available within 2 business days from the time of referral.²⁴
Specialization vs. Non-Specialization	<ul style="list-style-type: none"> • Rehab providers on a mixed unit must have expertise in stroke rehab (see Footnote²) although they may assess/ treat a variety of other diagnostic population groups on the unit. • A critical mass of 8 beds within the unit is 	<ul style="list-style-type: none"> • Stroke team/service is dedicated to providing stroke care. • A critical mass of 8 beds within the unit is required to support the development and maintenance of clinical expertise among nursing, allied health and medical staff and the 	<ul style="list-style-type: none"> • LTLD stroke rehab specializes in persons with severe disability arising from Stroke and other neurological conditions (e.g. ABI, MS, Guillian Barre, Spinal Cord Injury, West Nile virus). • Rehab providers must have expertise in stroke rehab (see Footnote²) although they may assess/ treat a

³ Clinical expertise is defined as “the proficiency and judgment that clinicians acquire through clinical experience and clinical practice.” (*British Medical Journal* 1996; 312:71-2) Clinicians rely on their expertise to balance the patient’s clinical state and circumstances, evidence-based research and patient preferences in their clinical decision-making and provision of treatment. (*Evidence-Based Medicine* 2002; 7:36-38). Rehab providers must carry a caseload of stroke patients on a regular basis to develop/maintain clinical skills to address problems with visual perception, communication, mobility, cognition and/or other impairments.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

INPATIENT STROKE REHAB			
Dedicated Stroke Team/Service in Inpatient Mixed Rehab Units in Acute Care and Rehab Hospitals		Dedicated Stroke Inpatient Unit in Acute Care and Rehab Hospitals	Low Tolerance Long Duration Stroke (LTLD/slowstream) Inpatient Rehab in CCC and Rehab Hospitals
	<p>required to support the development and maintenance of clinical expertise among nursing, allied health and medical staff and the acquisition of special equipment/resources required to treat stroke patients.</p> <ul style="list-style-type: none"> • These beds may serve patients with other types of neurological conditions (e.g. MS, Parkinson's, brain tumours, or brain injury with no more than mild cognitive impairment and no behavioural issues²⁵) as classified by the OHA's Rehabilitation Working Group.²⁶ 	<p>acquisition of special equipment/resources required to treat stroke patients.</p>	<p>variety of other diagnostic population groups on the unit (e.g. patients who have experienced a recent multi-system illness or fractured hip.)</p> <ul style="list-style-type: none"> • A critical mass of 8 beds within the unit is required to support the development and maintenance of clinical expertise among nursing, allied health and medical staff and the acquisition of special equipment/resources required to treat stroke patients.
Differentiating Criteria	<ul style="list-style-type: none"> • Unit serves a variety of diagnostic population groups. • For stroke rehab patients, a dedicated interprofessional team, including physician, with expertise in stroke rehab must be available. • In general, appropriate for patients with early FIM™²⁷ scores 40 – 80 as assessed during 1st week post onset (i.e. "middle band patients) and for younger stroke patients (i.e. < 55) regardless of stroke severity.²⁸ (Note: age criteria are to be used as guidelines rather than applied rigidly to each patient to allow for individual differences among patients.) • Coordinated team approach with regular team meetings/conferences.²⁹ • There should be at least one formal meeting per week to discuss progress, goals, discharge plans.³⁰ • Geographically clustered beds within the 	<ul style="list-style-type: none"> • In general, appropriate for patients with early FIM™ scores 40 – 80 as assessed during 1st week post onset (i.e. "middle band patients) and for younger stroke patients (i.e. < 55) regardless of stroke severity.³² (Note: age criteria are to be used as guidelines rather than applied rigidly to each patient to allow for individual differences among patients.) • Dedicated interprofessional team, including physician, with specialization in stroke care. • Coordinated team approach with regular team meetings/conferences.³³ • There should be at least one formal meeting per week to discuss progress, goals, discharge plans.³⁴ • Geographically clustered beds.³⁵ • Expectation is that patients will either be discharged home or to their preferred accommodation in the community. 	<ul style="list-style-type: none"> • In general, for patients with early FIM™ scores < 40 assessed during 1st week post onset (i.e. "lower band patients).³⁶ • For elderly patients (>75) with early FIM™ score of 40-60.³⁷ (Note: Age criteria are to be used as guidelines rather than applied rigidly to each patient to allow for individual differences among patients.) • Patients require a slower-paced rehab program for a longer duration to maximize rehab potential as these patients are typically more medically complex due to the presence of multiple co-morbid conditions. • Dedicated interprofessional team, including physician, with specialization in stroke rehab. • Coordinated team approach with regular team meetings/conferences.³⁸ • There should be at least one formal meeting per week to discuss progress, goals, discharge plans.³⁹ • Geographically clustered beds.⁴⁰ • The expectation is that patients will return to home or a

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

INPATIENT STROKE REHAB			
Dedicated Stroke Team/Service in Inpatient Mixed Rehab Units in Acute Care and Rehab Hospitals	Dedicated Stroke Inpatient Unit in Acute Care and Rehab Hospitals	Low Tolerance Long Duration Stroke (LTLD/slowstream) Inpatient Rehab in CCC and Rehab Hospitals	
	unit. ³¹ <ul style="list-style-type: none"> Expectation is that patients will either be discharged home or to their preferred accommodation in the community. 	community residential setting following LTLD rehab. <ul style="list-style-type: none"> Patients may be exempt from co-payment when located in CCC while the realistic goal for them remains returning to the community. 	
Typical Duration	<ul style="list-style-type: none"> On average: 4 – 6 weeks⁴¹ 	<ul style="list-style-type: none"> On average: 4 – 6 weeks.⁴² 	<ul style="list-style-type: none"> Typical duration is usually around 3 months.⁴³
Key Activities/ Nature of Service	<ul style="list-style-type: none"> Stroke rehab team provides rehabilitation for individuals requiring intensive interprofessional rehab. Interprofessional team to assess patient within 24-48 hours of admission and develop comprehensive rehab plan.⁴⁴ Augmentative Communication services to address communication needs. Stroke-specific wellness interventions that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual. Secondary prevention may be offered. Information and education should be provided to all patients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors, planning and decision making, resources and community support.⁴⁵ 	<ul style="list-style-type: none"> Stroke rehab programs are suitable for individuals requiring intensive interprofessional rehab. Interprofessional team to assess patient within 24-48 hours of admission and develop comprehensive rehab plan.⁴⁸ Augmentative communication services to address communication needs. Stroke-specific wellness interventions that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual. Secondary prevention may be offered. Information and education should be provided to all patients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors, planning and decision making, resources and community support.⁴⁹ Initiation of rehab referral to 	<ul style="list-style-type: none"> Suitable for individuals in need of interprofessional stroke rehab, who require an extended period of rehab to maximize recovery. LTLD rehab is typically offered in complex continuing care; however, it may also be available in rehab hospitals or long-term care. Interprofessional team to assess patient within 24-48 hours of admission and develop comprehensive rehab plan.⁵² Patients may also have a chronic and a complex condition that requires care over an extended period of time and who are expected to benefit from low intensity, long duration rehabilitation. Augmentative communication services to address communication needs. Stroke-specific wellness interventions that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing. Secondary prevention may be offered. Information and education should be provided to all patients and their families/caregivers at each stage of recovery. Education should include information about

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

INPATIENT STROKE REHAB		
Dedicated Stroke Team/Service in Inpatient Mixed Rehab Units in Acute Care and Rehab Hospitals	Dedicated Stroke Inpatient Unit in Acute Care and Rehab Hospitals	Low Tolerance Long Duration Stroke (LTLD/slowstream) Inpatient Rehab in CCC and Rehab Hospitals
	<ul style="list-style-type: none"> Initiation of rehab referral to outpatient/community-based rehab as is appropriate.^{46 47} 	<p>outpatient/community-based rehab as is appropriate.^{50 51}</p> <p>the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors, planning and decision making, resources and community support.⁵³</p> <ul style="list-style-type: none"> Initiation of rehab referral to inpatient or outpatient/community-based rehab as is appropriate.^{54 55}

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

OUTPATIENT/AMBULATORY STROKE REHAB PROGRAMS Services should be available within 5 business days from the time of referral ⁵⁶		
Single Service in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics Suitable for stroke survivors who are in need of an outpatient rehabilitation service in a single specialty area/profession. Services may include assessment only or assessment and treatment. Services may be provided during a one-time visit or multiple visits.	Dedicated Stroke or Mixed Population Interprofessional Team in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics Suitable for stroke survivors who have more than one rehab need and require interprofessional rehab using a coordinated approach.	Wellness Focused Rehab Groups Groups offered in an outpatient setting. Groups offered may include short term transitional groups or longer term ongoing groups.
Names Typically Used <ul style="list-style-type: none"> • Outpatient + profession (e.g., Outpatient Physiotherapy or Occupational Therapy). • Outpatient specialty area (e.g. Outpatient Hand Program, Seating Clinic, Augmentative Communication Clinic, Gait Clinic or Hearing Clinic). 	<ul style="list-style-type: none"> • Stroke Outpatient Rehabilitation Clinic/Program/Therapeutic Day services/ Day Hospital • Day Treatment Program • General Rehab Day Hospital Program 	<ul style="list-style-type: none"> • Stroke Self-Management Groups, • Moving on after stroke (MOST) • Stroke Exercise Programs • Stroke Education Series
Services Provided <ul style="list-style-type: none"> • Varies depending on specialty areas within institution. • Health professionals provide: <ol style="list-style-type: none"> a specialty service for a specific impairment or disability (e.g. gait, mobility, hearing) or profession-specific assessment, treatment plan recommendations or implementation of treatment plan and/or referral to other service providers. <p>Note: Specialty service may use an interprofessional approach.</p> <ul style="list-style-type: none"> • Services should be available within 5 business days from the time of referral⁵⁷ 	<ul style="list-style-type: none"> • Patients are expected to tolerate a minimum of 45 - 60 minutes of therapy per session. • Care is provided by an interprofessional stroke rehab team with expertise in stroke rehab.(See Footnote ⁴) • Core team typically includes one or more of the following: Physician, Nursing, Physiotherapy, Occupational Therapy and some programs may have access to Social Work, Pharmacy Consultation Speech-Language Pathology, Clinical Dietician, and Therapeutic Recreation. • Access to psychology and psychiatry may be available as well. • Services should be available within 5 business days from the time of referral⁵⁸ 	<ul style="list-style-type: none"> • Groups are led by an individual rehab provider or team of rehab specialists. • Typically meet once or twice per week. • Classes offered may include education on how to self-manage stroke related challenges and/or an exercise program or a combination of both. • Services should be available within 5 business days from the time of referral⁵⁹

⁴ Clinical expertise is defined as “the proficiency and judgment that clinicians acquire through clinical experience and clinical practice.” (*British Medical Journal* 1996; 312:71-2) Clinicians rely on their expertise to balance the patient’s clinical state and circumstances, evidence-based research and patient preferences in their clinical decision-making and provision of treatment. (*Evidence-Based Medicine* 2002; 7:36-38). Rehab providers must carry a caseload of stroke patients on a regular basis to develop/maintain clinical skills to address problems with visual perception, communication, mobility, cognition and/or other impairments.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

OUTPATIENT/AMBULATORY STROKE REHAB PROGRAMS Services should be available within 5 business days from the time of referral ⁵⁶				
Single Service in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics		Dedicated Stroke or Mixed Population Interprofessional Team in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics		Wellness Focused Rehab Groups
Specialization vs. Non-Specialization	<ul style="list-style-type: none"> Some services serve a particular specialty area (e.g. Seating Clinic or Gait Clinic). Other services are profession specific. Rehab providers treating stroke patients should have expertise in stroke rehab. (See Footnote³) 	<ul style="list-style-type: none"> Outpatient stroke rehab may be provided by a dedicated interprofessional stroke team or by a team that assesses/treats patients from a variety of diagnostic population groups. Rehab providers who are treating stroke patients should have expertise in stroke rehab. (See Footnote³) 	<ul style="list-style-type: none"> Groups focus on enhancing an individual's ability to cope with a particular disability or impairment. Specialized stroke wellness programs do exist; however, some wellness and exercise programs offered may be appropriate for more than one neurological condition. 	
Differentiating Criteria	<ul style="list-style-type: none"> Suitable for stroke patients discharged from acute care with mild disability (i.e. FIM™>80) following stroke, patients with moderate or severe strokes following inpatient rehabilitation⁶⁰ who are residing in the community and patients discharged from acute care to long-term care who require a single/specialty stroke rehab service. Stroke survivors are residing in the community with a specific single rehab need which may be an impairment, performance, activity or participation issue that requires assessment and/or treatment by a health professional. Patients may be referred from acute care, rehabilitation, or family physicians or other health professionals working in the community. Some patients may be discharged from an inpatient rehab program or from acute care and require ongoing rehab to achieve additional specific goals. In some hospitals, the service is only available for patients of that institution and their physicians. 	<ul style="list-style-type: none"> Suitable for stroke patients discharged from acute care with mild disability (i.e. FIM™>80) following stroke, patients with moderate or severe strokes following inpatient rehabilitation⁶¹ who are residing in the community and patients discharged from acute care to long-term care and require interprofessional stroke rehabilitation from more than one rehab service. Dedicated interprofessional team, including physician, with specialization in stroke rehab. Co-ordinated services with regular team meetings / conferences. Typically, these are community patients who are responsible for arranging their own transportation to and from their outpatient appointments. 	<ul style="list-style-type: none"> These groups are led by professional rehab providers. Groups are time-limited and goal-oriented to increase coping with an impairment or disability. Groups are publicly funded through the healthcare system although a small fee may be charged for materials. Typically, these are community patients who are responsible for arranging their own transportation to and from their outpatient appointments. 	

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

OUTPATIENT/AMBULATORY STROKE REHAB PROGRAMS Services should be available within 5 business days from the time of referral ⁵⁶			
Single Service in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics		Dedicated Stroke or Mixed Population Interprofessional Team in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics	Wellness Focused Rehab Groups
	<ul style="list-style-type: none"> Typically, these are community patients who are responsible for arranging their own transportation to and from their outpatient appointments. 		
Typical Duration	<ul style="list-style-type: none"> Varies depending on the type of service. Specialty clinics may provide one or a few visits until the problem is resolved or managed. Other profession specific treatment programs may occur once or several times a week for 6 – 12 weeks or longer. 	<ul style="list-style-type: none"> 6-12 weeks, 2-3 times per week. 	<ul style="list-style-type: none"> 8 – 16 weeks
Key Activities/ Nature of Service	<ul style="list-style-type: none"> Specialized focussed assessment and/or treatment to resolve a functional or psychological issue and to promote re-integration to normal living or to maximize functional level. Services should include screening for cognitive function, behavioural issues, depression/mood, falls and behavioural issues. Patients have the opportunity to participate in as much therapy appropriate to their needs as they are able and willing to tolerate. Augmentative communication services to address communication needs. Information and education should be provided to all clients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors, planning and decision making, resources and community support.⁶² 	<ul style="list-style-type: none"> Specialized focussed assessment and/or treatment to resolve a functional or psychological issue and to promote re-integration to normal living or to maximize functional level. Services should include screening for cognitive function, behavioural issues, depression/mood, falls and behavioural issues. Patients have the opportunity to participate in as much therapy appropriate to their needs as they are able and willing to tolerate. Augmentative communication services to address communication needs. Interventions are time limited and goal directed. Interventions could be delivered in a group format or on an individual basis. Information and education should be provided to all clients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors, planning and decision making, resources and community support.⁶³ 	<ul style="list-style-type: none"> Groups provide stroke-specific wellness interventions that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual. Secondary stroke prevention strategies may be offered.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

COMMUNITY (Rehab is provided to client in home, school, or work environment) Home-based services should be available within 5 business days from the time of referral. ⁶⁴		
Community – Single Service		Community Based – Dedicated Interprofessional Team
Names Typically Used	Community Care Access Centre (CCAC);	Outreach (e.g. Behavioural, Geriatric, School) or ABI CCAC. No programming specific to stroke rehab is currently available outside of the Chedoke McMaster/Toronto Central CCAC research project noted above.
Services Provided	<ul style="list-style-type: none"> • May include OT, PT, SLP, SW, Nutrition, Nursing, Case Management, and Physician. • Clients may receive more than one service. • Rehab providers typically work as individual providers; however, communication with other health providers occurs on an as-needed basis. • CCACs provide in-home rehab services through contracts with Provider Agencies and manage clients through a Case Management collaborative model. • Services should include screening for cognitive function, swallowing, depression/mood, falls and behavioural issues. • Patients with acute stroke should typically be prioritized as High Risk in CCACs, as opposed to Moderate or Low Risk referrals. • Services should be available within 5 days for home-based stroke rehabilitation.⁶⁵ 	<ul style="list-style-type: none"> • Interprofessional team: OT, PT, SLP, SW, Nursing, Case Manager. May include: Physician, Psychology, Behaviour Therapist, Child Youth Worker, Family Facilitators. • Co-ordinated team conferences. • Services may include assessments, individualized programs, brief interventions, consultative assistance, and educational sessions to parents, families and professionals. • CCACs provide in-home rehab services through contracts with Provider Agencies and manage clients through a Case Management collaborative model. • Patients with acute stroke should typically be prioritized as High Risk in CCACs, as opposed to Moderate or Low Risk referrals. • Services should include screening for cognitive function, swallowing, depression/mood, falls and behavioural issues.
Specialization vs. Non-Specialization	<ul style="list-style-type: none"> • Health professionals should have expertise in stroke rehab (See Footnote ⁵) 	<ul style="list-style-type: none"> • These programs are specialized to provide rehab to: <ol style="list-style-type: none"> (1) specific rehab populations or

⁵ Clinical expertise is defined as “the proficiency and judgment that clinicians acquire through clinical experience and clinical practice.” (*British Medical Journal* 1996; 312:71-2) Clinicians rely on their expertise to balance the patient’s clinical state and circumstances, evidence-based research and patient preferences in their clinical decision-making and provision of treatment. (*Evidence-Based Medicine* 2002; 7:36-38). Rehab providers must carry a caseload of stroke patients on a regular basis to develop/maintain clinical skills to address problems with visual perception, communication, mobility, cognition and/or other impairments.

Stroke Rehab Definition Framework

This framework applies to individuals who have rehab potential and identified rehab goals

COMMUNITY (Rehab is provided to client in home, school, or work environment) Home-based services should be available within 5 business days from the time of referral. ⁶⁴		
Community – Single Service		Community Based – Dedicated Interprofessional Team
Differentiating Criteria	<ul style="list-style-type: none"> For stroke patients discharged from acute care with early FIM™ score of > 80⁶⁶, other stroke patients following inpatient rehabilitation and those discharged from acute care to long-term care who require community-based stroke rehab. Service is provided in the environment that is most appropriate (e.g. client is home-bound; services are focused on community re-engagement, school re-integration or vocational return). 	<p style="text-align: center;">(2) reduce the impact of a particular disability.</p> <ul style="list-style-type: none"> Health professionals should have expertise in stroke rehab (See Footnote⁴) For stroke patients in acute care with early FIM score of > 80 and other stroke patients following inpatient rehabilitation⁶⁷ Clients may be: <ol style="list-style-type: none"> Home-bound or have limited tolerance potential; or Require focused assessment, intervention or consultation within natural environment (e.g. home, school or work). Dedicated interprofessional team. Coordinated services with regular team meetings/conferences.
Typical Duration	<ul style="list-style-type: none"> Varies depending on service. Typically 1 -2 visits per week. CCAC therapy services typically offered for 6 weeks – 12 weeks. 	<ul style="list-style-type: none"> Varies depending on service provided.
Key Activities/Nature of Service	<ul style="list-style-type: none"> Assessment, treatment and discharge planning to community activities. Referrals to disease or population-specific wellness programs that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual and secondary prevention may be offered. Information and education should be provided to all clients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors that could lead to a second stroke, planning and decision making, resources and community support.⁶⁸ 	<ul style="list-style-type: none"> Assessments, treatment, consultation, discharge planning to community activities. Referrals to disease or population-specific wellness programs that provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual and secondary prevention may be offered. Information and education should be provided to all clients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors to prevent a second stroke, planning and decision making, resources and community support.⁶⁹

ENDNOTES

Levels of Evidence used in the Evidence-Based Review of Stroke Rehab (2006) to assess research findings:

Level 1a (Strong): Findings supported by results of a meta-analysis or from results of 2 or more Random Controlled Trials (RCT) of at least “fair” quality.

Level 1b (Moderate): Findings supported by a single RCT of at least “fair” quality.

Level 2 (Limited): Findings supported by minimum of 1 non-experimental study (e.g. non-randomized controlled trial, cohort studies)

Level 3 (Consensus): Agreement by experts on appropriate course of treatment. Consensus opinion is lowest form of evidence.

Level 4 (Conflicting): Disagreement between findings of at least 2 RCTs.

Levels of Evidence Used in Canadian Best Practice Recommendations for Stroke Care (2006):

Level A: At least one RCT; or, meta-analysis of RCTs.

Level B: Well designed controlled trail without randomization; or well designed cohort or case-control analytic study; or, multiple time series, dramatic results of uncontrolled experiment.

Level C: At least one well designed, non-experimental descriptive study (e.g. comparative studies, correlation studies, case studies); or expert committee reports, opinions and/or experience of respected authorities.

Level D: Expert committee reports, opinions and/or experience of respected authorities. Grading indicates that directly applicable clinical studies of good quality are absent.

R: Recommended good practice based on the clinical experience of the Guideline Development Group.

¹ There is Level B evidence supporting the role of the interprofessional team. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 4, Acute Stroke Management). Canadian Stroke Network. Heart and Stroke Foundation.

² Level C Evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³ See Standard #3a in *Consensus Panel on the Stroke Rehabilitation System “Time is Function”*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007. See also the GTA Rehab Network Inpatient Rehab Referral Guidelines (www.gtarehabnetwork.ca).

⁴ There is Level A evidence that information and education should be provided to all patients and their families/caregivers at each stage of recovery. Education should include information about the nature of the stroke, signs and symptoms, impairments and their impact/management, risk factors, planning and decision making, resources and community support. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Summary of Recommendations). Canadian Stroke Network. Heart and Stroke Foundation.

⁵ There is strong (Level 1) evidence that patients with mild strokes can be rehabilitated in an outpatient or home setting. See Triage model in Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

⁶ Level A evidence that all patients *not* admitted to acute care should undergo a comprehensive outpatient assessment(s) that includes medical and functional assessments preferably within 2 weeks. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁷ Pooled results of 12 studies indicate clear benefit (Level 1a evidence) of specialized stroke care (i.e. acute/subacute rehab unit) versus care on an alternative form of care (i.e. general medical ward) with respect to mortality, combined mortality and dependency, functional outcomes, length of stay. See Teasell R., Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Appendix: Important Findings, Interprofessional Specialized Stroke Rehabilitation Units) London, Ont.

⁸ Level 1 evidence that all patients with stroke should begin therapy as early as possible once medically stable. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.3, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁹ For detailed information regarding the criteria for rehab candidacy, medical stability and rehab readiness, see the GTA Rehab Network's *Inpatient Rehab Referral Guidelines* (2005) at http://www.gtarehabnetwork.ca/referral_guide.asp.

¹⁰ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 2 business days for inpatient stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

¹¹ There is strong evidence that interprofessional stroke rehab provided by a team experienced in and dedicated to stroke care maximizes functional outcomes. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Appendix: Important Findings, Interprofessional Specialized Stroke Rehabilitation Units) London, Ont.

¹² See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

¹³ Teasell et al., (in press). There is strong (Level 1a) evidence that greater intensity of therapies provided in the early stages following stroke onset improves functional outcomes. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Appendix: Important Findings) London, Ont.

¹⁴ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.3, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

¹⁵ Currently, there is no evidence-based literature to support the amount of staffing required.

¹⁶ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 2 business days for inpatient stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

¹⁷ Teasell et al., (in press). There is strong (Level 1a) evidence that greater intensity of therapies provided in the early stages following stroke onset improves functional outcomes. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Appendix: Important Findings) London, Ont.

¹⁸ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.3, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

¹⁹ Currently, there is no evidence-based literature to support the amount of staffing required.

²⁰ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 2 business days for inpatient stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

²¹ See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4). London, Ont.

²² Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.3, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

²³ Currently, there is no evidence-based literature to support the amount of staffing required.

²⁴ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 2 business days for inpatient stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

²⁵ As per the recommendations of the ABI Rehab Definitions Task Group, Fall 2007.

²⁶ The Neurology rehab population group as defined by the OHA Rehabilitation Working Group includes "patients exhibiting functional deficits of neurogenic origin other than stroke, including Multiple sclerosis, Parkinson's, Guillain-Barre Syndrome, Amyotrophic Lateral Sclerosis, dystrophies, palsies, brain tumours, encephalopathies and other neurological conditions." OHA Rehabilitation Working Group. Rehabilitation Program Definitions March 1999.

²⁷ FIM™ is a trademark of the Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc.

²⁸ There is strong (Level 1A) evidence that patients with moderate to severe stroke should receive rehabilitation on a stroke-specific rehab unit. There is moderate (Level 2) evidence that patients with moderate to severe strokes or patients <55 with a severe stroke are best managed in an intensive stroke rehab program following stroke onset. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

²⁹ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³⁰ Level C evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³¹ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³² There is strong (Level 1A) evidence that patients with moderate to severe stroke should receive rehabilitation on a stroke-specific rehab unit. There is moderate (Level 2) evidence that patients with moderate to severe strokes or patients <55 with a severe stroke are best managed in an intensive stroke rehab program following stroke onset. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

³³ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³⁴ Level C evidence. See *Canadian Best Practice Recommendations for Stroke Care, 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³⁵ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³⁶ There is limited (Level 2) evidence that severe strokes may be better managed in a lower tolerance, longer duration rehab program. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

³⁷ There is limited (Level 2) evidence that patients older than 75 with a moderate stroke (early FIM 40-60) should be managed in a less intensive stroke rehab program. See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

³⁸ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

³⁹ Level C evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁴⁰ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁴¹ See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

⁴² See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

⁴³ See Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

⁴⁴ Level C evidence. *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁴⁵ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Summary of Recommendations). Canadian Stroke Network. Heart and Stroke Foundation.

⁴⁶ There is strong (Level 1) evidence that patients with mild strokes can be rehabilitated in an outpatient or home setting. See Triage model in Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

⁴⁷ Level A evidence that all patients *not* admitted to acute care should undergo a comprehensive outpatient assessment(s) that includes medical and functional assessments preferably within 2 weeks. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁴⁸ Level C evidence. *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁴⁹ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Summary of Recommendations). Canadian Stroke Network. Heart and Stroke Foundation.

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⁵¹ Level A evidence that all patients *not* admitted to acute care should undergo a comprehensive outpatient assessment(s) that includes medical and functional assessments preferably within 2 weeks. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁵² Level C evidence. *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5.2, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁵³ Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Summary of Recommendations). Canadian Stroke Network. Heart and Stroke Foundation.

⁵⁴ There is strong (Level 1) evidence that patients with mild strokes can be rehabilitated in an outpatient or home setting. See Triage model in Teasell R, Foley N, Salter K, Bhogal SK, Bayona N, Jutai J and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

⁵⁵ Level A evidence that all patients *not* admitted to acute care should undergo a comprehensive outpatient assessment(s) that includes medical and functional assessments preferably within 2 weeks. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Section 5, Stroke Rehab and Community Reintegration). Canadian Stroke Network. Heart and Stroke Foundation.

⁵⁶ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 5 days for both ambulatory and home-based stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

⁵⁷ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 5 days for both ambulatory and home-based stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

⁵⁸ There is Level 3 evidence that the wait time from when the stroke survivor is Rehab Ready and referred to rehabilitation services until the start of all appropriate rehabilitation services should be no more than 5 days for both ambulatory and home-based stroke rehabilitation. See Standard #18 in *Consensus Panel on the Stroke Rehabilitation System "Time is Function"*. Report from the Consensus Panel on the Stroke Rehabilitation System to the Ministry of Health and Long-Term Care. Heart and Stroke Foundation of Ontario, April 30, 2007.

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⁶⁰ There is strong (Level 1) evidence that patients with mild strokes can be rehabilitated in an outpatient or home setting. See Triage model in Teasell R., Foley N, Salter K, Bhogal SK, Bayona N., Jutai J. and Speechley M. (2006). *Evidence-based review of stroke rehabilitation, 9th Edition*, (Module 4) London, Ont.

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⁶² Level A evidence. See *Canadian Best Practice Recommendations for Stroke Care: 2006*. (Summary of Recommendations). Canadian Stroke Network. Heart and Stroke Foundation.

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