

Champlain Regional Stroke Rehabilitation System Project Charter

Purpose of Board Review	<input type="checkbox"/> For Information Only <input checked="" type="checkbox"/> For Approval <input type="checkbox"/> For Endorsement to Proceed with Further Planning/Refinement/Review		
Project Charter Sponsor(s)	Champlain Local Health Integration Network Champlain Regional Stroke Network Steering Committee Rehabilitation Network of Champlain		
Project Type	<input type="checkbox"/> Service Enhancement <input type="checkbox"/> New Service / Program <input checked="" type="checkbox"/> Integration Activity <input type="checkbox"/> Demonstration Project	<input type="checkbox"/> Single Phase Project <input type="checkbox"/> Multi-Phase Project	
Funding Required	N/A		
Funding Source	Provincial Priority: Ontario Stroke System & Ontario's Excellent Care For All Strategy	Funding Year (s): N/A	Funding Type: N/A
Anticipated Project Owner (Accountability)	<input type="checkbox"/> Champlain LHIN <input type="checkbox"/> Champlain LHIN Health Service Provider	<input checked="" type="checkbox"/> Assigned Champlain LHIN Project Team	

Project Deliverables / Goals

- The Alpha-FIM score is completed on all stroke patients at 72 hours on all stroke units in the Champlain region.
- All stroke patients within the Champlain LHIN will be admitted to a sub-acute stroke service based on a regionally defined patient flow algorithm.
- Median stroke onset to rehabilitation admission time is less than or equal to the provincial benchmark on the Champlain LHIN Stroke Report Card.

OSN Strategic Directions

Credible leader, strategic partner, and effective advocate for fewer strokes and better outcomes
Catalyst to drive for excellence in stroke care and vascular health

Project Timelines Start: December 10th 2010 Completion: March 31st 2013

Project Reviewed By: **Networks:** Champlain Regional Stroke Network Steering Committee & Rehabilitation Network of Champlain
Collaboratives: No
Task Groups: Champlain Regional Stroke Rehabilitation System Project Team
Champlain LHIN Staff: Involved in Project Charter Development

Strategic Directions¹

- Improve the health of Champlain residents.
- Improve their experience with the health system.
- Improve the performance of our health system.

Priorities for Change²

- Reducing wait times in Emergency Departments.
- Reducing the time patients spend in alternate level of care beds in hospitals.
- Supporting the roll-out of Ontario's Diabetes Strategy.
- Enhancing Mental Health and Addictions Services.
- Building on an eHealth Framework

Targeted Population³

- People with pre-diabetes or diabetes
- People with mental illness and/or substance addictions
- People with complex health conditions
- Residents of Champlain

Integration Components⁴

- Is organized around the needs of clients/populations and not providers.
Exists when "a network of organizations that provides or arranges to provide a coordinated continuum of
- services to a defined population and is willing to be held clinically and fiscally accountable for the outcomes and the health status of the population served.
- Uses a variety of strategies for different populations/communities.

¹ (Champlain LHIN, September 4, 2009)

² (Champlain LHIN, September 4, 2009)

³ (Champlain LHIN, September 4, 2009)

⁴ (Champlain LHIN, September 4, 2009)

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Project Name: Champlain Regional Stroke Rehabilitation System		Project Acronym or No.: CRSRS	
Project Sponsor: Champlain Local Health Integration Network, Champlain	Project Coordinator: Champlain Regional Stroke Network	Target Project Completion Date: 03/31/2013	
Project Lead/Project Manager: Jim Lumsden		Version No.: 2.0	Version Date: 03/22/2013

Project Background

Walker Report – Caring For Our Aging Population and Addressing Alternate Level of Care (ALC)⁵:

The report submitted by Dr. David Walker, Provincial ALC Lead, stated that our health care system needs to undergo a broader transformation in order to meet the care needs of an aging population. For system change to occur, many of the institutional and organizational components of our current system will need to re-orient themselves to a priority of caring for seniors in ways not accomplished to date. Without such change, we will experience a wave of frail older Ontarians receiving poor care in the wrong environment amongst those ill equipped to provide it, with resultant disruption of the engines of health care designed for other purposes.

The acute care hospital is not designed to meet a patient's restorative, supportive or rehabilitative needs, but has conversely been shown to advance functional deterioration and place patients at significant risk of hospital-related infections, falls and other adverse events. The report also recommends that hospitals shift the role and responsibility for discharge planning to Community Care Access Centres (CCAC) to ensure identification of appropriate discharge destinations using system level, consistent admission criteria, facilitated by automated systems such as Resource Matching and Referral.

There is also a lack of clear program standards and admission criteria for sub-acute care programs. Local Health Integration Networks and CCACs should continue to work towards ensuring that CCACs are the single point of access for transitioning patients to the appropriate care settings. This should include standardized admission criteria and assessment tools for rehabilitation beds and CCC programs, as well as processes to ensure that these destinations are considered for all appropriate patients.

Commission on the Reform of Ontario's Public Services. Public Services for Ontarians: A Path to Sustainability and Excellence⁶:

The report submitted by Mr. Don Drummond, Chair of the Commission on the Reform of Ontario's Public Services, identifies a need for a long-term view of how the health system should change to meet future needs. Specifically he suggests one way to improve the quality of the health care system includes shifting it to one designed mainly for chronic care.

Drummond acknowledges the importance of timely access to appropriate services, stating "too often, treatment delayed is treatment diminished. The stroke victim who cannot gain immediate access to necessary physiotherapy may suffer permanent damage, with long term costs to the patient, family and health care system alike." Further he identifies a need to integrate services to get rid of "care silos". Drummond includes the following in his suggestions to improve Ontario's health care system: focussing on a patient-centric (versus program-centric) system. This would feature coordination along the care continuum and evidence-based policies guiding decisions determining which services, procedures, etc., are effective, efficient and eligible for public funding.

⁵ (Walker, June 30 2011)

⁶ (Drummond, February 2012)

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Project Background

Canadian Stroke Network - Quality of Stroke Care in Canada⁷:

The Canadian Stroke Network audit provides an overview of stroke care across the continuum in Canada. One hundred and three Ontario hospitals were included in this audit, accounting for more than fifteen thousand stroke patients. A key finding relates to access to stroke rehabilitation: “access to appropriate rehabilitation is vital, yet not well-monitored”. The report identifies that patients with moderate-severe stroke (30-40% of all strokes) benefit most from rehabilitation, yet only 37% of this sub-group are discharged from acute care to rehabilitation facilities. In Canada, 19% of all patients are discharged from acute care to rehabilitation with a median length of stay in rehab of 35 days.

Further, the audit found that “in general, there is a lack of reliable information on quality of inpatient and outpatient rehabilitation”. Specifically it identified a lack of information on rehabilitation assessments done in acute care, leading to difficulties in determining whether patients are discharged to appropriate destinations from acute care. As well the audit found inconsistencies in documentation regarding inpatient and outpatient rehabilitation, and it suggests a need to address this gap in order to properly evaluate efficient and effective rehabilitation service delivery models. The report identifies the development of standards for stroke rehabilitation as being a top priority.

Canadian Stroke Strategy - Canadian Best Practice Recommendations for Stroke Care⁸:

The 2010 update to the Canadian Best Practice Recommendations for Stroke Care provide greater detail regarding stroke rehabilitation unit care. Specifically it recommends that all patients who are determined to be appropriate for stroke rehabilitation (based on standardized assessment) are provided timely access to specialized inpatient rehabilitation. Integral to this recommendation is the need for adequate numbers of stroke care units and a critical mass of experienced staff. Further, the recommendations indicate a need for sufficient resources to enable patient access to the appropriate type and intensity of rehabilitation care.

The Impact of Moving to Stroke Rehabilitation Best Practices in Ontario: A Preliminary Report⁹:

This report, submitted by Matthew Meyer, provides preliminary information on the economic impact of the 4 following stroke rehabilitation recommendations: 1) timely transfer of appropriate patients from acute to rehabilitation (i.e. day 5-7), 2) provision of greater intensity of treatment during inpatient rehabilitation (i.e. 3 hours per day, 7 days per week), 3) out-patient and community-based treatment, 4) ensuring that all rehabilitation candidates have equitable access to the rehabilitation services they require (i.e. triaging stroke patients based on a 72 hour post event Alpha-FIM score). Based on this health economic model, these changes would improve patient outcomes and remain cost neutral for the health care system.

Hospital Accountability Planning Submission (HAPS) Guidelines¹⁰:

This document outlines how hospitals and LHINs work together and clarifies expectations regarding their responsibilities. A central expectation is that the HAPS reflects the best possible patient experience, including providing the best service in the best place at the best time with the best transitions. This version aligns with the provincial priorities to decrease wait time and increase access to family health care. As a way to address wait times the HAPS Guidelines document suggests a 3-fold strategy including: decreasing emergency demand by increasing community care, increasing emergency capacity and decreasing alternative level of care designations by improving flow of patients to more appropriate care settings. The HAPS Guidelines include the 2010-2013 Integrated Health

⁷ (Canadian Stroke Network, 2011)

⁸ (Canadian Stroke Strategy, 2010)

⁹ (Ontario Stroke Network, February 23 2012)

¹⁰ (Ontario Ministry of Health and Long-Term Care, 2012-2013)

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Project Background

Service Plan (IHSP) priorities to improve emergency service, decrease alternative level of care designations and improve diabetes, mental health and addictions services. Included in its guiding principles are the notions of cooperation, coordination and integration so that community providers, health service providers, LHINs and government must work together to decrease duplication of better coordinate health service delivery. Specific to stroke services, the Guidelines outlines the responsibility of Regional Stroke Centres including its role to lead a regional network of health care agencies and others for collaboration, integration, access, approval and monitoring of regional planning and implementation of stroke best practices across the continuum (p.12).

The Ontario Stroke System (OSS):

The mission of the Ontario Stroke System is “To continuously improve stroke prevention, care, recovery and reintegration” to achieve the vision of “Fewer Strokes, Better Outcomes”. The values of the OSS are:

- Equity and Comprehensiveness
 - Our activities will be aligned with the health interests of all Ontarians and in doing so will improve access to the care continuum and respect the diversity of the population we serve.
- Accountability and Integrity
 - We will demonstrate accountability and integrity in all of our activities and in the use and management of public resources.
- Transparency and Engagement
 - We will foster and demonstrate a culture of responsive, interactive, open and respectful communication and collaboration.
- Learning and Performance Improvement
 - We will contribute to and apply evidence and knowledge, advance new ideas and take action to continuously improve the stroke system.
- Leadership and Innovation
 - We will look to the future, embrace change and innovation, challenge the status quo, grow more leaders and through partnership build capacity.

To facilitate these efforts, the province is divided into 11 stroke regions, and depending on the size these regions are further subdivided into stroke districts. The Regional Stroke Centres (RSCs) and the Enhanced District Stroke Centres (EDSCs) have the mandate to facilitate the implementation of Stroke Best Practices on a regional level. The associated District Stroke Centres (DSCs) drive down these practices within their districts, working closely with their community partners.

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Project Scope

Project Purpose:

To design and establish a comprehensive Champlain Regional Stroke Rehabilitation System.

Vision:

Establish a Champlain Regional Stroke Rehabilitation System that rapidly triages stroke patients with residual deficits to an objectively defined and publicly funded stroke rehabilitation service according to the Canadian Best Practice Guidelines for Stroke Care.

Goals of Champlain Regional Stroke Rehabilitation System:

- 1) **Systematically Identify** stroke patient cohorts by using the AlphaFIM score to assign a probable discharge disposition. The Alpha-FIM score is completed on all stroke patients at 72 hours on all stroke units in the Champlain region.
- 2) **Define Stroke Rehabilitation Service Tiers.** The appropriate sub-acute stroke service will be identified for all stroke patients with residual deficits based on a regionally defined patient flow algorithm in alignment with the Canadian Best Practice Recommendations for Stroke Care.
- 3) **Rapid Access to Sub-acute Stroke Services.** Median stroke onset to rehabilitation admission time is less than or equal to the provincial benchmark on the Champlain LHIN Stroke Report Card.
- 4) **Establish Performance Monitoring Process.** The CRSN-RNOC Stroke Rehabilitation Sub-Committee will establish a Champlain Regional Stroke Rehabilitation System performance monitoring process to review system performance with stakeholders, benchmark against other Local Health Integration Networks and suggest opportunities for continuous quality improvement.

Strategic Alignment

The Champlain LHIN has focused the Integrated Health Service Plan 2010-2013 on the following strategic priorities:

- 1) Improve the health of Champlain residents
- 2) Improve their experience with the health system
- 3) Improve the performance of our health system

A Champlain Regional Stroke Rehabilitation System “improves the health of Champlain residents” by providing stroke patients with residual deficits rapid access to the appropriate rehabilitation services. This is particularly important as the efficacy of stroke rehabilitation services declines with time.¹¹ It also “improves their experience with the health system” by creating an efficient and transparent referral process to quickly triage patients to the appropriate tier of rehabilitation services. It “improves the performance of our health system” by maximizing our existing stroke rehabilitation services by rapidly and transparently matching patients to the appropriate service. This will help to mitigate the devastating and costly effects of stroke which has the longest length of stay of any disease and the highest ALC days.¹² Direct and indirect health-care costs for new patients with disabling stroke average \$71,873 in the six-month period following the stroke event.¹³

¹¹ (Biernaskie, Chernenko, & Corbett, February 4 2004)

¹² (Ontario Ministry of Health and Long-Term Care, January 2007)

¹³ (Mittmann, June 6-8, 2010)

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The Ontario Stroke Network has established the following strategic directions:

- 1) **Credible leader**, strategic partner and effective advocate for fewer strokes and better outcomes
- 2) **Catalyst to drive** for excellence in stroke care and vascular health¹⁴

This proposal achieves the strategic direction of being a “credible leader, strategic partner and effective advocate for fewer strokes and better outcomes” by allowing the Champlain Regional Stroke Network Steering Committee to fulfill its responsibility as a Community of Practice Network to provide stroke expertise to the Champlain LHIN regarding the regional integration of stroke rehabilitation services. The Champlain Regional Stroke Network will be the “catalyst to drive for excellence in stroke care and vascular health” by establishing a comprehensive regional stroke rehabilitation system with a performance monitoring process where the CRSN-RNOC Stroke Rehabilitation Sub-Committee will review system performance with stakeholders, benchmark against other Local Health Integration Networks and suggest opportunities for continuous quality improvement based on the Canadian Best Practice Recommendations for Stroke Care and Ontario Stroke Network Stroke Reference Group Recommendations for Stroke Rehabilitation.

The Champlain Regional Stroke Network Steering Committee has established the following operational goal in the Champlain Regional Stroke Network Strategic Plan 11-12FY to 13-14FY:

- Submit a report to RNOC for the development of a Champlain Regional Stroke Rehabilitation System.

¹⁴ The term "vascular" is defined as all forms of vascular and related diseases, encompassing heart disease, stroke, and diseases of other major blood vessels (Joint Statement of Commitment, Toward an Integrated Vascular Health Strategy for Ontario, July 23, 2010).

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Project Benefits

The Champlain LHIN Stroke Report Card for 2010/11 demonstrates rehabilitation system performance that generally falls below the Ontario median resulting in most rehabilitation areas being in the poor performance category (Figure 1).

Figure 1

ONTARIO STROKE REPORT CARD, 2010/11: CHAMPLAIN LOCAL HEALTH INTEGRATION NETWORK

Indicator No.	Care Continuum Category	Indicator ⁵	LHIN FY 2010/11 (2009/10)	Variance within LHIN (Min–Max)	Provincial Benchmark ⁶	High Performer ⁷	
						SubLHIN/Facility	LHIN
1	Public awareness and patient education	Proportion of patients who arrived at ED less than 3.5 hours from stroke symptom onset.	48.4% (39.9%)	42.3–57.8%	52.0% (41.5%)	Elgin SubLHIN	2, 11
2	Prevention of stroke	Annual age- and sex-adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.3 (1.2)	1.0–2.3	1.1 (1.1)	Northwest Mississauga SubLHIN	None
3	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	15.3 (12.3)	0.0–63.6	14.3 (12.3)	Lakeridge Health – Bowmanville Site	7
4	Prevention of stroke	Proportion of ischemic stroke/TIA patients with atrial fibrillation prescribed or recommended anticoagulant therapy on discharge from acute care.	80.4% (80.7%)	33.3–100.0%	86.0% (93.6%)	Queensway-Carleton Hospital	None
5	Prevention of stroke	Proportion of ischemic stroke patients without atrial fibrillation who received carotid imaging prior to hospital discharge.	78.6% (71.5%)	0.0–100.0%	92.8% (92.5%)	Markham Stouffville Hospital	5
6	Acute stroke management	Proportion of suspected stroke/TIA patients who received a brain CT/MRI within 24 hours of arrival at ED.	92.8% (89.9%)	16.7–98.7%	97.7% (97.7%)	Cambridge Memorial Hospital	5, 7
7	Acute stroke management	Proportion of ischemic stroke patients who arrived at ED less than 3.5 hours from symptom onset and received acute thrombolytic therapy (TPA) (excluding those with contraindications).	31.6% (34.2%)	0.0–47.4%	61.2% (58.9%)	Trillium Health Centre	None
8	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit at any time during their inpatient stay.	52.1% (42.0%)	0.0–87.3%	87.5% (77.3%)	North Bay General Hospital	None
9	Acute stroke management	Proportion of stroke (excluding TIA) patients with a documented initial dysphagia screening performed during admission to acute care.	67.0% (72.5%)	0.0–88.2%	83.7% (87.8%)	Thunder Bay Regional Health Sciences Centre	14
10	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	36.7% (–)	0.0–72.6%	14.0% (–)	Halton Healthcare Services – Oakville Site	2
11	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation.	30.2% (30.9%)	12.5–49.5%	42.3% (40.7%)	Chatham-Kent SubLHIN	1
12	Stroke rehabilitation	Proportion of stroke (excluding TIA) patients discharged from acute care who received a referral for outpatient rehabilitation.	3.6% (6.4%)	2.0–7.5%	12.1% (13.2%)	Burlington SubLHIN	14, 13
13	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation (RCG-1 and RCG-2).	13.0 (16.0)	7.0–60.0	7.0 (7.0)	Grey Bruce Health Services – Owen Sound Site	9
14	Stroke rehabilitation	Rehabilitation therapy staff/bed ratio for inpatient stroke rehabilitation.	–	–	–	–	–
15	Stroke rehabilitation	Proportion of ALC days to total length of stay in inpatient rehabilitation (Active + ALC) (RCG-1).	5.8% (–)	0.0–49.6%	6.3% (–)	Trillium Health Centre	6
16	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation (RCG-1).	0.7 (0.6)	0.1–1.4	1.1 (1.2)	Royal Victoria Hospital	9
17	Stroke rehabilitation	Mean number of CCAC visits provided to stroke/TIA patients in 2008/09 and 2009/10.	5.3 (6.1)	n/a	6.8 (7.6)	n/a	5, 3
18	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe strokes (RPG = 1100 or 1110) (RCG-1).	25.9% (25.5%)	0.0–66.7%	46.9% (49.4%)	Royal Victoria Hospital	None
19	Re-integration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	11.6% (10.4%)	2.9–19.3%	4.7% (3.6%)	Manitoulin-Sudbury SubLHIN	13
20	Re-integration	Age- and sex-adjusted readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients).	7.3 (7.0)	0.0–12.4	8.0 (8.3)	Kingston General Hospital	10

¹ Performance below the 50th percentile.

² Performance at or above the 50th percentile and greater than 5% absolute/relative difference from the benchmark.

³ Benchmark achieved or performance within 5% absolute/relative difference from the benchmark.

⁴ Data not available or benchmark under development.

⁵ Facility-based analysis (excluding indicators 1, 2, 11, 12 and 19) for patients aged 18 to 108. Indicators 1, 4–9 and 12 are based on 2010/11 OSA data; otherwise, CIHI data. 2009/10 report card metric in brackets. Low rates are desired for indicators 2, 3, 10, 13, 15, 19 and 20.

⁶ Provincial benchmarks were calculated using the ABC methodology, except for indicators 3, 15 and 20 where the provincial rate was used. For benchmarking methodology, see Weissman et al. *J Eval Clin Pract.* 1999; 5(3):269-81.

⁷ High-performing acute sites include high-volume institutes (treating more than 100 strokes per year). High-performing rehabilitation sites include those with moderate volumes (admitting more than 42 stroke patients per year).

Hospital Service Accountability Agreement indicators, 2010/11
– Data not available n/a = Not applicable

Project Benefits

This relatively poor performance cannot be explained by insufficient rehabilitation capacity as the Champlain LHIN ranks third in gross inpatient rehabilitation capacity as measured by Days of Care Rate/100,000 population 15+ and age-adjusted (Figure 2).

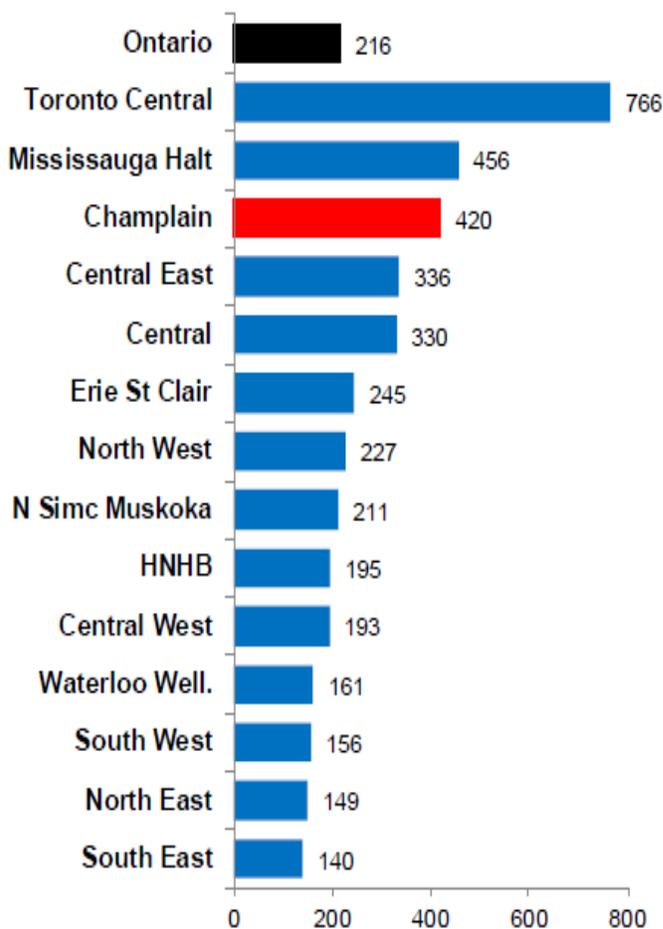
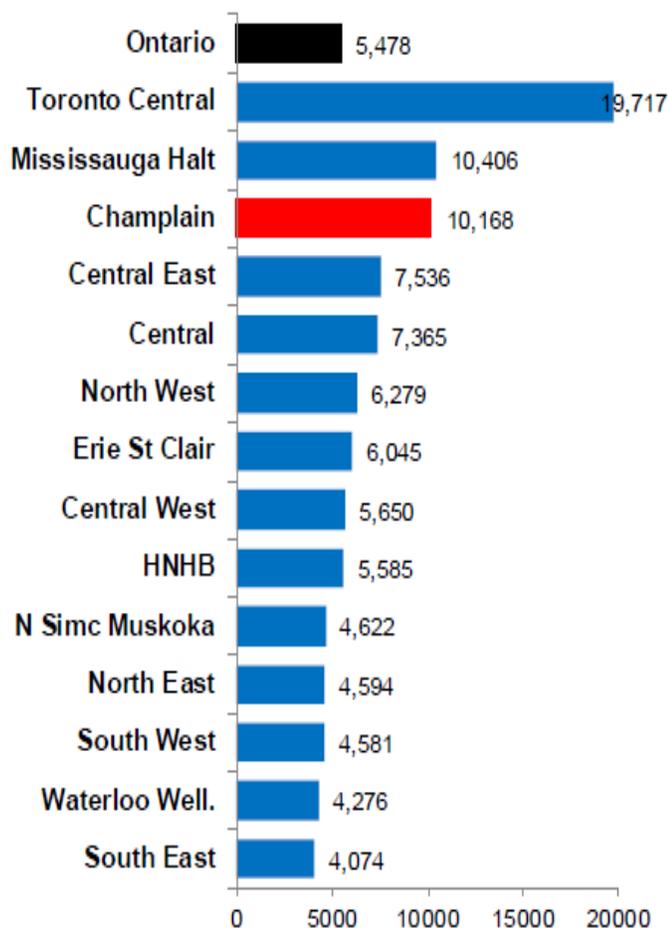
Figure 2

IP Rehab Use Rate by LHIN of Patient Residence*

(Discharged patients/100,00 people 15+, age-adjusted, 2011-12)

Days of Care Rate

Episodes Rate



*Irrespective of LHIN of hospitalization. Excludes patients not discharged by Mar 31, 2012. Days of care only includes days during 2011-12 ignoring any portion of patients' stays either before or after.

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Project Benefits

The Champlain LHIN has provincially leading inpatient stroke rehabilitation capacity as indicated by the Economic Model for Stroke Rehabilitation in Ontario: Mapping Resource Availability and Patient Needs conducted by Matthew J. Meyer, et al, 2011 for the Ontario Stroke Network (Figure 3).

Figure 3

High Accessibility	Low Accessibility
Champlain	North Simcoe Muskoka
Erie St. Clair	South West
North West	Hamilton Niagara Haldimand Brant
North East	Waterloo Wellington

Data from the Ontario Stroke Evaluation Report 2011 indicates that the Champlain LHIN has a 13 day median wait time from stroke onset to inpatient rehabilitation admission in comparison to the Ontario median of 10 days (Figure 4).

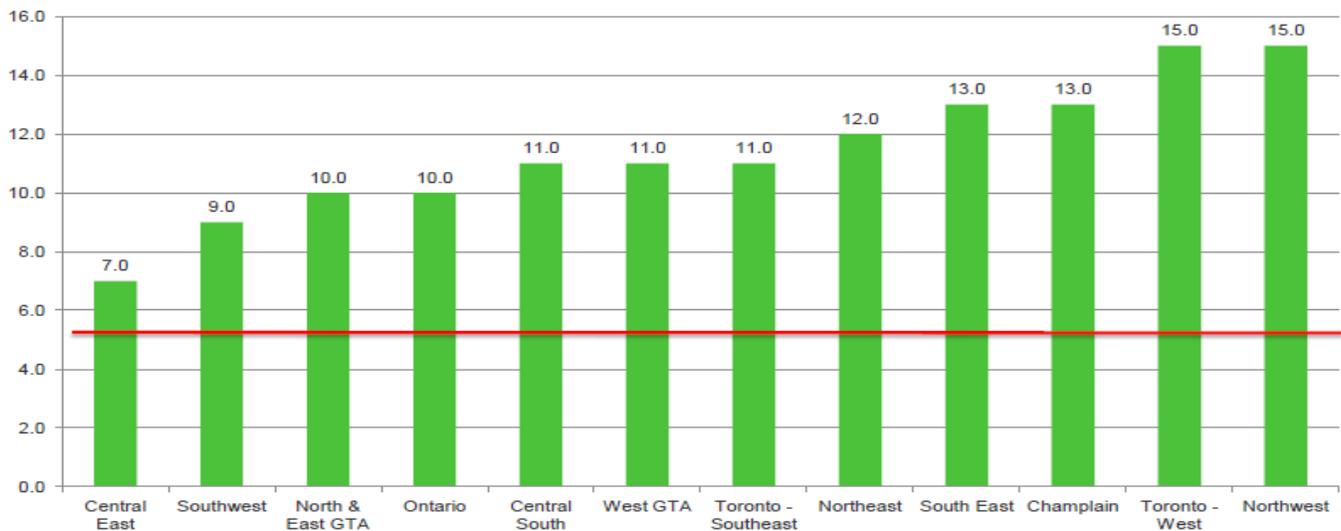
Figure 4



Ontario Stroke Evaluation Report 2011

Days from Stroke Onset to Inpatient Rehab Admission 10/11FY

■ Days from Stroke Onset to Inpatient Rehabilitation Admission, Median



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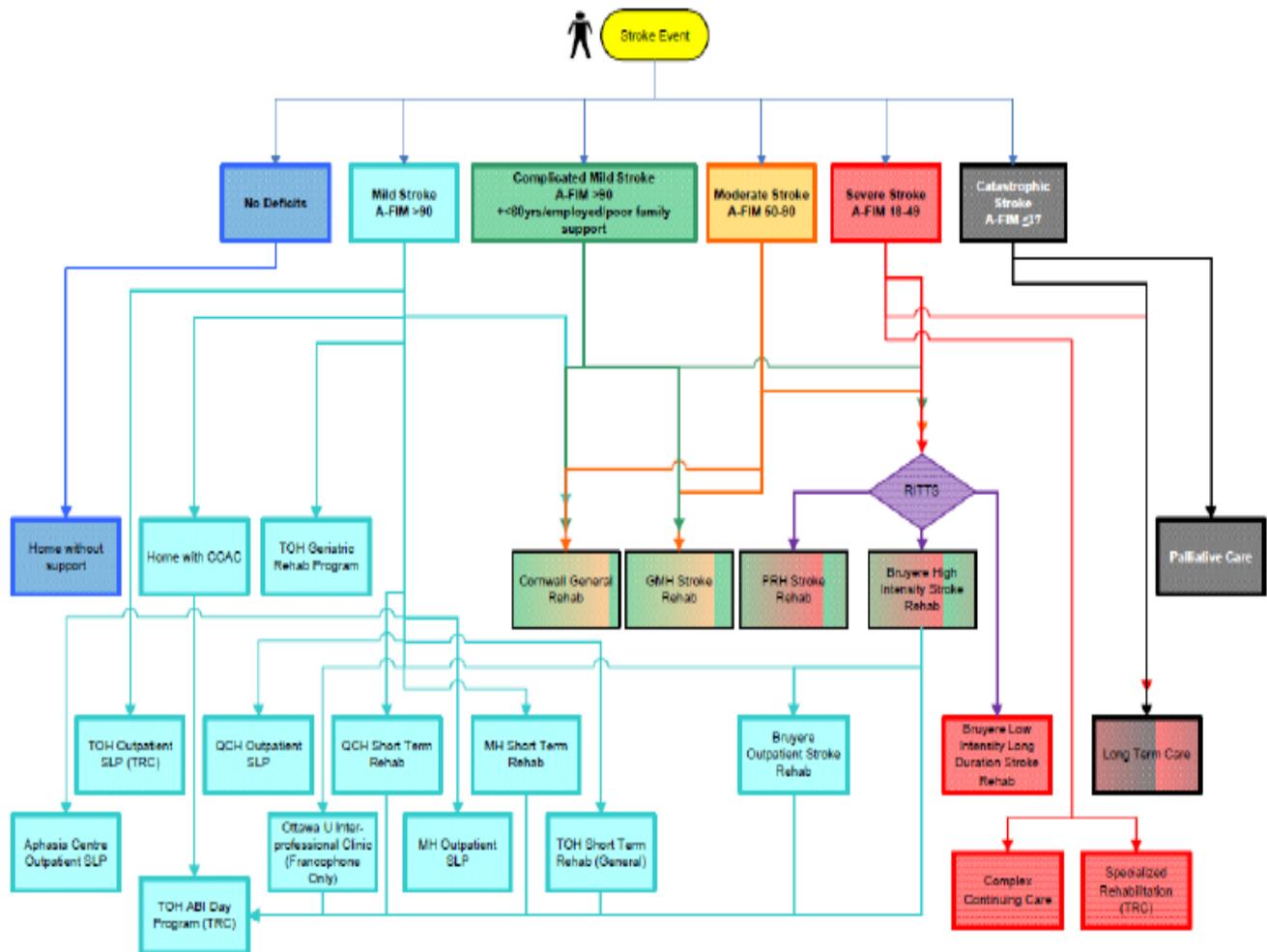
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Project Benefits

Mapping the current state of the Champlain Stroke Rehabilitation System demonstrates a high level of system complexity prior to overlaying individual service inclusion/exclusion criteria and referral source mix (Figure 5).

Figure 5

Champlain Stroke Rehab System Current State



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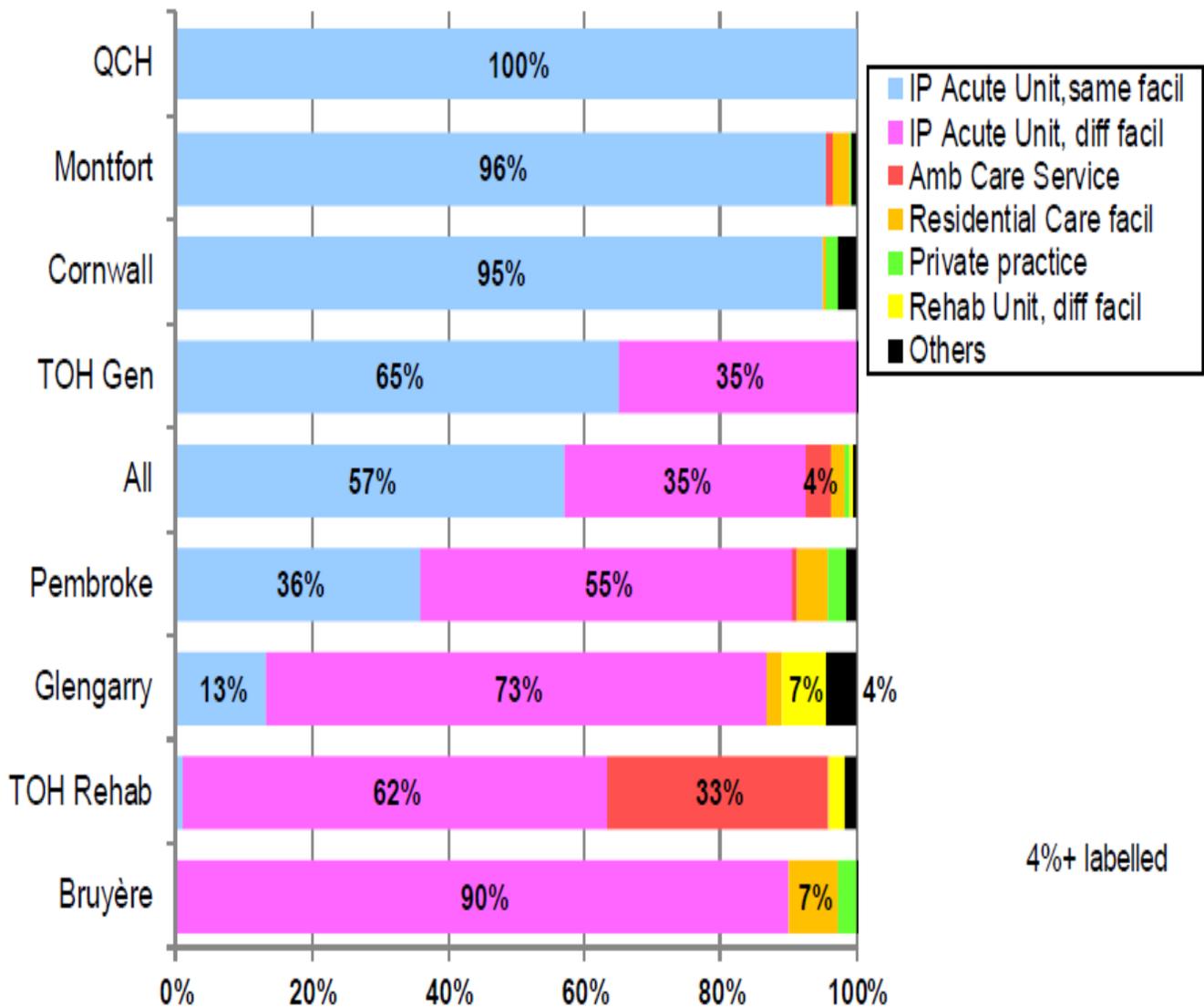
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Project Benefits

Data from the Champlain LHIN during the 11-12FY indicates that there is considerable variation in the referral source mix for inpatient rehabilitation capacity based on where the patient received their acute care (Figure 6).

Figure 6

IP Rehab Admissions by Site & Referral Source (2011-12, Champlain Sites)



4%+ labelled

Project Benefits

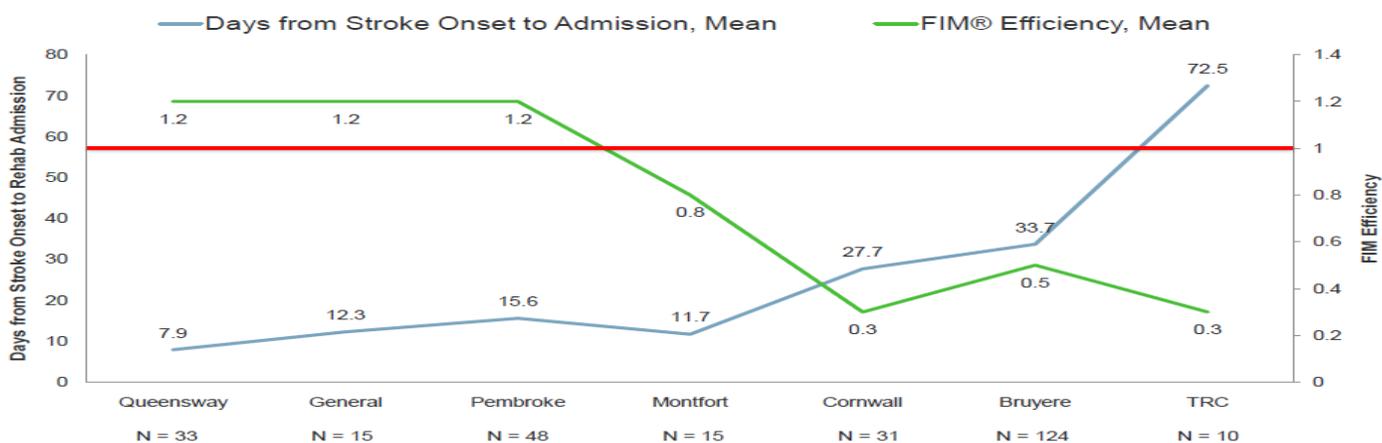
2011 & 2012 Ontario Stroke Evaluation Reports indicate a correlation between time from stroke onset to stroke rehabilitation admission and Functional Independence Measure (FIM) Efficiency (Figure 7 & 8).

Figure 7



Ontario Stroke Evaluation Report 2011

Days from Stroke Onset to Rehab Admission vs FIM Efficiency 09/10FY



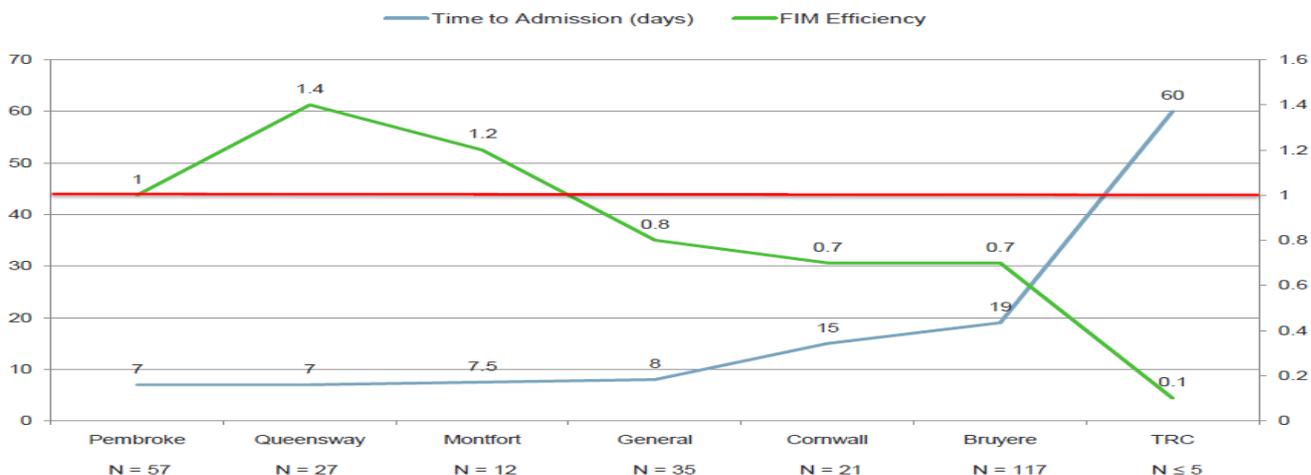
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Figure 8



Ontario Stroke Evaluation Report 2012

Day from Stroke Onset to Rehab Admission vs FIM Efficiency 10/11FY



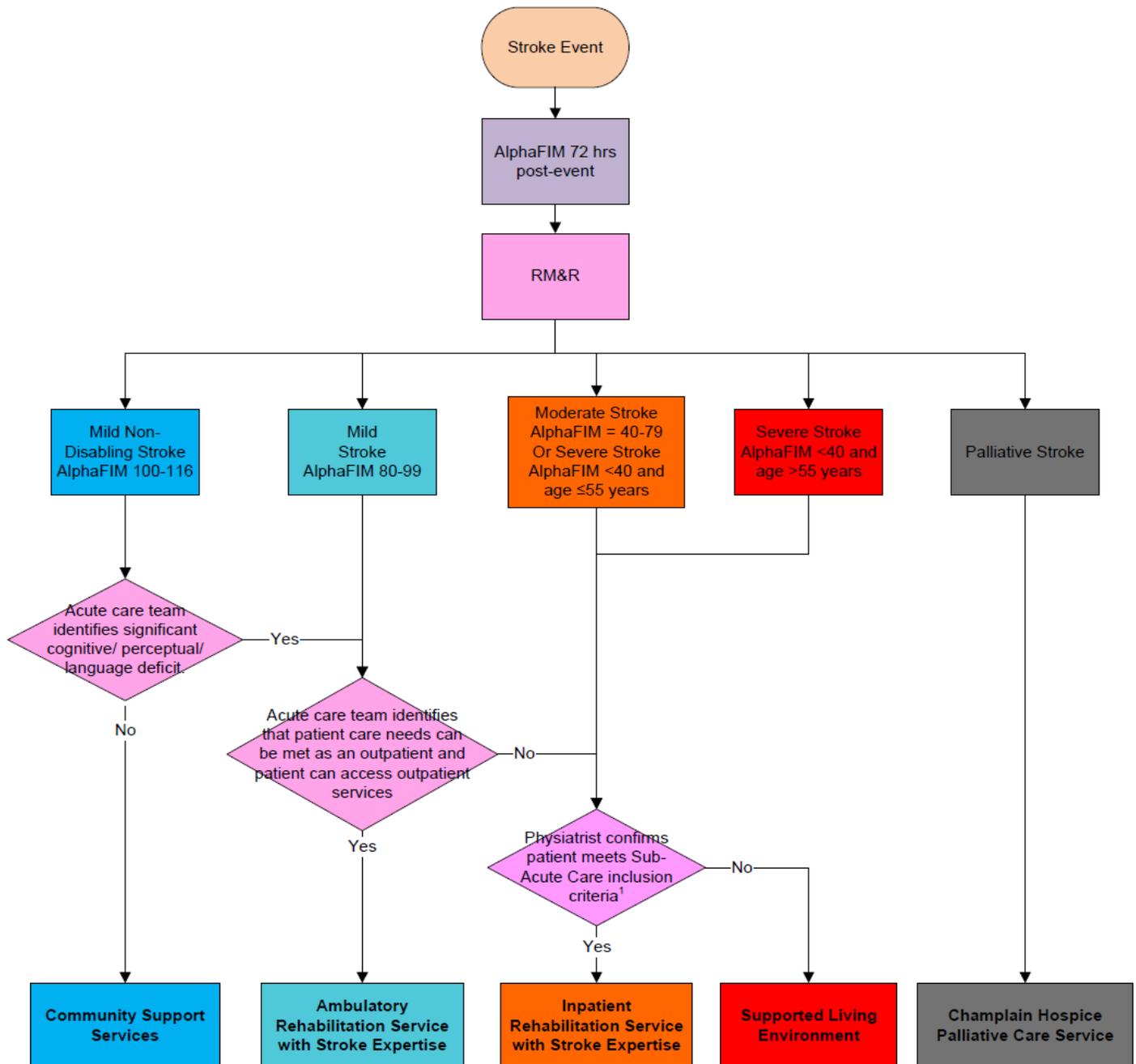
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The following future state process map for the Champlain Regional Stroke Rehabilitation System defines publicly funded sub-acute stroke service tiers with consistent and regionally defined admission criteria (Figure 9).

Figure 9



1. If inclusion criteria are not met secondary to medical instability then the patient will be reassessed by the physiatrist within 72 hours of the acute care team confirming a stable medical status.

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Goals, Objectives & Performance Measures

Goals	Objectives/Deliverables	Performance Measures
All stroke patients are referred to the appropriate sub-acute stroke service based on objective criteria.	The Alpha-FIM score guides the decision for which sub-acute stroke service will be suitable for a stroke patient.	All sub-acute stroke services use the Alpha-FIM score to guide the admission decision.
All sub-acute stroke services have admission criteria that are continuous across all stroke patient groups and consistent across the Champlain LHIN.	All sub-acute stroke services will be grouped into 5 sub-acute stroke service pathways which will cover all possible Alpha-FIM scores.	Define and obtain agreement on sub-acute stroke service tiers for all of Champlain region.
All stroke patients will be referred to the appropriate sub-acute service using the CCAC's Resource Matching and Referral System.	All stroke patients requiring sub-acute stroke services are waitlisted using the CCAC Resource Matching and Referral System.	The CCAC's Resource Matching and Referral System is the only way stroke patients can be referred to a sub-acute stroke service.
All acute stroke patients will be discharged home or to the appropriate sub-acute stroke service once medically stable.	All ischemic stroke patients will be transferred to the appropriate sub-acute service according to the Achievable Benchmarks of Care established by the Ontario Stroke Network.	Median stroke onset to rehabilitation admission is less than or equal to the provincial benchmark in Champlain LHIN Stroke Report Card. Median ALC days is zero.
	All hemorrhagic stroke patients will be transferred to the appropriate sub-acute service according to the Achievable Benchmarks of Care established by the Ontario Stroke Network.	Median stroke onset to rehabilitation admission is less than or equal to the provincial benchmark in Champlain LHIN Stroke Report Card. Median ALC days is zero.
The Alpha-FIM measure will be completed on all stroke patients 72 hours after their stroke event.	All stroke units in the Champlain region will complete the Alpha-FIM measure on all stroke patients at 72 hours after their stroke event.	72 hour Alpha-FIM completion rate for all stroke units in the Champlain region is 100% in Ontario Stroke Evaluation Report.
All stroke patients who are discharged to the community will be referred to a community based program (e.g. Heart Wise Exercise, Aphasia Centre of Ottawa).	Establish systematic referral process for all stroke patients discharged to the community.	Number of stroke patients accessing community based exercise captured and reported by the Ontario Stroke Network.
All stroke patients admitted to inpatient rehabilitation will be considered for discharge to a community based program when their length of stay is equal to rehabilitation patient group length of stay target defined by the Ontario Stroke Network.	Median inpatient rehabilitation care length of stay will equal rehabilitation patient group length of stay target defined by the Ontario Stroke Network.	Median inpatient rehabilitation care length of stay on the Ontario Stroke Evaluation Report equals rehabilitation patient group length of stay target defined by the Ontario Stroke Network.

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Project “IN” & “OUT” of Scope Items

“IN” Scope	“OUT” of Scope
➤ All publicly funded stroke rehabilitation services in the Champlain region.	➤ Privately funded stroke rehabilitation services.
➤ Stroke rehabilitation services accessed from acute care.	➤ Stroke rehabilitation services accessed from the community.
➤ Sub-acute stroke services can be grouped and provided on a sub-LHIN basis. The following geographies will be able to sustain comprehensive sub-acute stroke services: <ul style="list-style-type: none"> ○ Ottawa ○ Renfrew County ○ Stormont, Dundas, and Glengarry Counties ○ Prescott and Russell Counties 	

Project Timelines

High-Level Milestones	Target Completion Dates
Approval of CRSN Strategic Plan	◆ December 2010
Approval of RNOC Stroke Sub-Committee Work Plan	◆ March 2011
Champlain Rehabilitation System Performance Presentations to RNOC and CRSN Steering Committee	◆ March 2012
CRSRS Project Charter Initial Draft	◆ June 2012
CRSRS Project Charter Final Draft	◆ September 2012
CRSRS Project Charter Approval by Rehabilitation Network of Champlain Stroke Sub-Committee, Rehabilitation Network of Champlain, and Champlain Regional Stroke Network Steering Committee	◆ December 2012
CRSRS Project Charter Approval by Champlain Local Health Integration Network	◆ March 2013

Project Costs

- Not Applicable

Funding Source

- Not Applicable

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Project Team

Team Member, Organization	Role on the Project	Required Involvement	
		Estimated Duration	Level of Effort
<ul style="list-style-type: none"> Lisa Sullivan, Nicole Lafreniere-Davis, & James Fahey Champlain Local Health Integration Network 	<ul style="list-style-type: none"> As Champlain LHIN representative for the Rehabilitation Network of Champlain and Champlain Regional Stroke Network Steering Committee 	Dec 2010-Mar 2013	Moderate
<ul style="list-style-type: none"> Sabine Mersmann Pembroke Regional Hospital 	<ul style="list-style-type: none"> As Chair of Champlain Regional Stroke Network Steering Committee 	Dec 2010-Mar 2013	Moderate
<ul style="list-style-type: none"> Debbie Timpson Pembroke Regional Hospital 	<ul style="list-style-type: none"> As Chair of Rehabilitation Network of Champlain Stroke Sub-Committee 	Dec 2010-Mar 2013	High
<ul style="list-style-type: none"> Jim Lumsden Champlain Regional Stroke Network 	<ul style="list-style-type: none"> As Director of the Champlain Regional Stroke Network 	Dec 2010-Mar 2013	High
<ul style="list-style-type: none"> Tracey Dyks Champlain Regional Stroke Network 	<ul style="list-style-type: none"> As Best Practice Physiotherapist of the Champlain Regional Stroke Network 	Mar 2012-Mar 2013	Moderate
<ul style="list-style-type: none"> Sue Dojeiji Bruyere Continuing Care 	<ul style="list-style-type: none"> As Chief and Chair Physical Medicine and Rehabilitation at Bruyere Continuing Care 	Oct 2012-March 2013	Moderate

Project Partners

Partners	Common Interests & Priorities	Roles & Responsibilities
<ul style="list-style-type: none"> Ontario Stroke Network/Ontario Stroke System 	<ul style="list-style-type: none"> Improved stroke system performance and a model for integrated stroke rehabilitation services. 	<ul style="list-style-type: none"> Provide rehabilitation standards, and information for comparison and benchmarking.
<ul style="list-style-type: none"> Champlain LHIN 	<ul style="list-style-type: none"> Improved stroke system performance and a model for integrated rehabilitation services. 	<ul style="list-style-type: none"> Representing the interests of the residents of the Champlain region.
<ul style="list-style-type: none"> Rehabilitation Network of Champlain 	<ul style="list-style-type: none"> Improved stroke system performance and a model for integrated rehabilitation services. 	<ul style="list-style-type: none"> Representing the interests of Rehabilitation Service Providers within the Champlain region.
<ul style="list-style-type: none"> Champlain Regional Stroke Network 	<ul style="list-style-type: none"> Improved stroke system performance. 	<ul style="list-style-type: none"> Project management support for the development of the Champlain Regional Stroke Rehabilitation System.

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Partners	Common Interests & Priorities	Roles & Responsibilities
<ul style="list-style-type: none"> Champlain Community Care Access Centre 	<ul style="list-style-type: none"> Improved stroke system performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Bruyere Continuing Care 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> The Ottawa Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Queensway-Carleton Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Montfort Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Pembroke Regional Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Cornwall Community Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Hawkesbury & District General Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Glengarry Memorial Hospital 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Aphasia Centre of Ottawa 	<ul style="list-style-type: none"> Define role within Champlain Regional Stroke Rehabilitation System and improve performance. 	<ul style="list-style-type: none"> Provide advice and guidance on the development and implementation of the Champlain Regional Stroke Rehabilitation System.

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Project Stakeholders

Stakeholders	Interests & Needs	Management Strategies
<ul style="list-style-type: none"> Residents of the Champlain LHIN 	<ul style="list-style-type: none"> The residents of the Champlain LHIN need to have rapid access to the right rehabilitation services close to home. 	<ul style="list-style-type: none"> Communicate structure of Champlain Regional Stroke Rehabilitation System through the Champlain Regional Stroke Network Website.
<ul style="list-style-type: none"> Champlain LHIN 	<ul style="list-style-type: none"> The Champlain LHIN wants to improve the performance of the stroke rehabilitation system. 	<ul style="list-style-type: none"> Maintain engagement of the Champlain LHIN throughout the design and implementation process. Provide regular progress reports through the Champlain Regional Stroke Network Steering Committee
<ul style="list-style-type: none"> Sub-acute stroke patients with residual deficits. 	<ul style="list-style-type: none"> Need to have timely and transparent access to rehabilitation services. 	<ul style="list-style-type: none"> Establish a systematic and transparent referral process from high volume stroke centres to tiered rehabilitation services.
<ul style="list-style-type: none"> Acute care organizations <ul style="list-style-type: none"> The Ottawa Hospital Queensway Carleton Hospital Montfort Hospital Pembroke Regional Hospital Hawkesbury & District General Hospital Cornwall Community Hospital 	<ul style="list-style-type: none"> Acute care organizations are under significant emergency and alternative level of care pressures that will be alleviated by a regional stroke rehabilitation system. These centres will need to ensure the completion of the Alpha-FIM instrument 72 hours post stroke event. Publicly funded stroke rehabilitation service providers will want to define their role within the Champlain Regional Stroke Rehabilitation System. 	<ul style="list-style-type: none"> Impacts to acute care organizations will be determined by the project team and communicated through the Champlain Regional Stroke Network (CRSN) Steering Committee, CRSN Stroke Prevention & Acute Care Committee, and RNOG Stroke Sub-committee.
<ul style="list-style-type: none"> Stroke Survivors Association of Ottawa (SSAO) 	<ul style="list-style-type: none"> The residents of the Champlain LHIN need to have rapid access to the right rehabilitation services close to home. 	<ul style="list-style-type: none"> Maintain engagement of the Champlain LHIN throughout the design and implementation process. Provide regular progress reports through the Champlain Regional Stroke Network Steering Committee

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Other Related Projects & Initiatives

Project/Initiative	Interdependency & Impact
<ul style="list-style-type: none"> Hamilton Niagara Haldimand Brant LHIN Stroke Model of Care Bed Mapping Project. 	<ul style="list-style-type: none"> The Hamilton Niagara Haldimand Brant LHIN has served as a model for the development of the Champlain Regional Stroke Rehabilitation System.
<ul style="list-style-type: none"> Ministry of Health and Long-Term Care Hospital Accountability Planning Submission. 	<ul style="list-style-type: none"> The new HAPS Guidelines include a monitoring indicator for the Proportion of stroke (excluding TIA) patients discharged to inpatient rehabilitation.
<ul style="list-style-type: none"> Ontario Stroke Audit 	<ul style="list-style-type: none"> The Ontario Stroke Audit evaluates the effectiveness of stroke care at all acute care hospitals across the province.
<ul style="list-style-type: none"> Ontario Stroke Care Report Card for the Champlain LHIN 	<ul style="list-style-type: none"> This public report card contains 17 key performance indicators for stroke care in Ontario. There are 5 indicators specific to stroke rehabilitation.
<ul style="list-style-type: none"> Accreditation Canada – Stroke Distinction 	<ul style="list-style-type: none"> Accreditation Canada has added a new stroke distinction module for rehabilitation.
<ul style="list-style-type: none"> Ontario Stroke Evaluation Report 2011: Improving System Efficiency by Implementing Stroke Best Practices 	<ul style="list-style-type: none"> This report evaluates the efficiency and effectiveness of organized stroke care across Ontario.
<ul style="list-style-type: none"> Walker Report – Caring For Our Aging Population and Addressing Alternate Level of Care (ALC) – June 30th, 2011 	<ul style="list-style-type: none"> This report submitted by Dr. David Walker, Provincial ALC Lead, stated that our health care system needs to undergo a broader transformation in order to meet the care needs of an aging population.
<ul style="list-style-type: none"> Mosaic of Stroke: Advancing Rehabilitation in the Central East Stroke Network 	<ul style="list-style-type: none"> This report details key messages provided through an initiative to improve collaboration among Central East LHIN stroke rehabilitation stakeholders to find innovative ways to advance the provision of stroke rehabilitation best practices.
<ul style="list-style-type: none"> Moving to Stroke Best Practices in Waterloo-Wellington LHIN 	<ul style="list-style-type: none"> This report details the stroke priority recommendations for a stroke recovery system of care for the Waterloo-Wellington LHIN precipitated to meet one its Integrated Health Service Plan (2010-2013) priorities to “improve the outcomes for stroke patients through integrated programs”. It suggests a “banding model” in which facilities would provide specific bands of service along the continuum of care.
<ul style="list-style-type: none"> Toronto Stroke Flow Initiative 	<ul style="list-style-type: none"> The Toronto Stroke Networks have developed this initiative to assist organizations with prioritization and implementation of best practice to create a common standard of care across the system. This includes a summary of the key best practices with administrative and clinical processes required to meet recommendations and monitoring indicators.

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People & Organization Change Impacts

Description of Impact	Impact Management Strategies
<ul style="list-style-type: none"> Acute care hospitals will improve their efficiency and consistency of diagnostic testing and completion of Alpha-FIM tool within 72 hours of stroke onset, leading to improved consistency in rehabilitation referrals. Benefits will include earlier discharge from acute care and improved matching of patients to the level of care required (shared responsibility with rehab providers). 	<ul style="list-style-type: none"> Need to work with diagnostic imaging to create a scheduling process for stroke to ensure that all tests are completed sequentially and at the correct time. Ensure a critical mass of Alpha-FIM trained clinicians are available 7 days per week.
<ul style="list-style-type: none"> Publicly funded rehabilitation providers will admit more acute patients and experience reduced variability of patients referred to sub-acute stroke services. 	<ul style="list-style-type: none"> Need to work with rehabilitation service provider organizations to provide training and support to take more acute patients and develop a streamlined transfer back process for patient who experience complications. Need to develop same day surgical procedure completion between rehabilitation institution and acute care hospital (e.g. PEG tube placement). Communicate the benefit to patients of an earlier and more streamlined admission process. Communicate the benefit of allowing the rehabilitation institutions to focus on the delivery of patient care and reduce inefficiencies in referral process.
<ul style="list-style-type: none"> Patients will have quicker access to rehabilitation beds which will lead to improved outcomes and improved efficiency of the health care system. Patients, families and care providers will have improved clarity regarding sub-acute discharge destination which will lead to improved patient and family satisfaction. 	<ul style="list-style-type: none"> Ensure support from rehabilitation institutions that the anticipated rehabilitation setting will be communicated to the patient/family by the acute care team using the Alpha-FIM score to assist the decision making process. Communicate to the admission coordinators and physiatrists that using the Alpha-FIM score will streamline the existing admission process and provide greater clarity for clinicians, patients, and their families.
<ul style="list-style-type: none"> The Champlain LHIN health care system will be simplified and better integrated. The stroke population will be better served, leading to better outcomes with the same inputs. 	<ul style="list-style-type: none"> Need to communicate how changing the flow of the rehabilitation system will benefit patients, clinicians, rehabilitation institutions, acute care hospitals, and the LHIN by better matching patients to the appropriate services.

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Project Communications

Audience	Information Needs	Format & Timing	Responsible
<ul style="list-style-type: none"> All project team members 	<ul style="list-style-type: none"> Regular updates on the development of the planning forum and project charter. 	<ul style="list-style-type: none"> Via email, teleconference, face-to-face meetings, as feedback is sought from the group on an on-going basis. 	<ul style="list-style-type: none"> Jim Lumsden
<ul style="list-style-type: none"> Champlain Regional Stroke Network Steering Committee 	<ul style="list-style-type: none"> Regular quarterly reporting by CRSN Director. Circulation of CRSN Communiqués. 	<ul style="list-style-type: none"> E-mail In-person 	<ul style="list-style-type: none"> Jim Lumsden
<ul style="list-style-type: none"> Rehabilitation Network of Champlain 	<ul style="list-style-type: none"> Regular quarterly reporting by CRSN Director. Circulation of CRSN Communiqués. 	<ul style="list-style-type: none"> E-mail In-person 	<ul style="list-style-type: none"> Debbie Timpson
<ul style="list-style-type: none"> Rehabilitation Network of Champlain Stroke Sub-Committee 	<ul style="list-style-type: none"> Circulation of meeting minutes/updates. Regular quarterly reporting by CRSN Director. Circulation of CRSN Communiqués. 	<ul style="list-style-type: none"> E-mail In-person 	<ul style="list-style-type: none"> Debbie Timpson
<ul style="list-style-type: none"> Acute care organizations 	<ul style="list-style-type: none"> Circulation of CRSN Communiqués. Presentations to Champlain Regional Stroke Prevention and Acute Care Committee as required. 	<ul style="list-style-type: none"> E-mail In-person 	<ul style="list-style-type: none"> Jim Lumsden

Project Risks

Risk	Likelihood	Impact	Risk Response
Timelines are not met.	Moderate	Moderate	Establish milestones and provide frequent updates to project participants; monitoring of timelines by CRSN Steering Committee and CRSN RNOC Subcommittee
Lack of commitment from project participants and stakeholders	Moderate	High	Ensure early engagement of project participants; obtain formal commitment from all stakeholders; develop a communication strategy to address potential concerns and to highlight positive outcomes of the project for stroke patients within the Champlain region; ensure ongoing open communication with stakeholders

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Risk	Likelihood	Impact	Risk Response
Median stroke onset to rehabilitation admission times of less than or equal to the provincial benchmark on the Champlain LHIN Stroke Report Card may not be achievable by all rehabilitation facilities due to physical separation from existing acute care facilities.	High	High	Establish team to review and improve processes between acute and stand-alone rehabilitation facilities to expedite patient transfer to rehabilitation and possible readmission to acute care to ensure patient safety.
Rehabilitation patient group length of stay targets defined by the Ontario Stroke Network may not be achieved due to insufficient outpatient and community based rehabilitation services within the Champlain LHIN.	High	High	Liaise with the Champlain LHIN and health service providers to increase outpatient and community based rehabilitation.

Critical Success Factors

- 1) **Systematically Identify** stroke patient cohorts by using the AlphaFIM score to assign a probable discharge disposition. The Alpha-FIM score is completed on all stroke patients at 72 hours on all stroke units in the Champlain region.
- 2) **Define Stroke Rehabilitation Service Tiers.** The appropriate sub-acute stroke service will be identified for all stroke patients with residual deficits based on an objectively defined patient flow algorithm in alignment with the Canadian Best Practice Recommendations for Stroke Care.
- 3) **Rapid Access to Sub-acute Stroke Services.** Median stroke onset to rehabilitation admission time is less than or equal to the provincial benchmark on the Champlain LHIN Stroke Report Card.
- 4) **Establish Performance Monitoring Process.** The CRSN-RNOC Stroke Rehabilitation Sub-Committee will establish a Champlain Regional Stroke Rehabilitation System performance monitoring process to review system performance with stakeholders, benchmark against other Local Health Integration Networks and suggest opportunities for continuous quality improvement.

Assumptions & Constraints

Assumptions	Constraints
<ul style="list-style-type: none"> • Sub-acute stroke services can be grouped and provided on a sub-LHIN basis. The following geographies will be able to sustain comprehensive sub-acute stroke services: <ul style="list-style-type: none"> ○ Ottawa ○ Renfrew County ○ Stormont, Dundas, and Glengarry Counties ○ Prescott and Russell Counties 	<ul style="list-style-type: none"> • The Ministry of Health and Long-Term Care and Champlain LHIN is not prepared to allocate additional resources to establish a regional stroke rehabilitation system.

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Sign-Off

Workstream Lead/Project Sponsor

Name & Organization	Signature	Date
James Fahey Senior Integration Specialist Champlain Local Health Integration Network	_____	_____

Project Lead/Project Manager

Name & Organization	Signature	Date
Jim Lumsden Director Champlain Regional Stroke Network	_____	_____

Project Partners

Name(s) & Organization(s)	Signature(s)	Date(s)
Chris O'Callaghan Executive Director Ontario Stroke Network	_____	_____
Chantale LeClerc CEO Champlain Local Health Integration Network	_____	_____
Helen Zipes Chair Rehabilitation Network of Champlain	_____	_____
Sabine Mersmann Chair Champlain Regional Stroke Network	_____	_____
Benard Blais CEO Bruyere Continuing Care	_____	_____
Dr. Jack Kitts CEO The Ottawa Hospital	_____	_____
Tom Schonberg CEO Queensway Carleton Hospital	_____	_____
Dr. Bernard Leduc CEO Montfort Hospital	_____	_____

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Pierre Noel
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Project Team Members

Name(s) & Organization(s)

Signature(s)

Date(s)

Sabine Mersmann
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Debbie Timpson
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CRSN-RNOC Stroke Sub-Committee

Jim Lumsden
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Charter Revision History

Version Numbering:

- 0.x - internal draft - under development (*Working copy for Project Coordinators*)
- 1.x - document under review / internal draft (*Begin 1.0 numbering when sent to Workstream Lead for comment*)
- 2.x - document submitted for approval (*Begin 2.0 numbering when sent to Oversight for approval*)
- 3.x - document approved (*Renumber to 3.0 after Oversight Approval*)

Revision No.	Description	Modified By	Date
0.1	First Draft of CRSRS Project Charter	Jim Lumsden	August 03, 2011
0.2	Development of CRSRS Project Charter	Jim Lumsden, Debbie Timpson, Sabine Mersmann	February 13, 2012
0.3	Revision of CRSRS Project Charter	Jim Lumsden & Tracey Dyks	March 04 2012
0.4	Revision of CRSRS Project Charter	Jim Lumsden & Tracey Dyks	March 05 2012
0.5	Revision of CRSRS Project Charter	Jim Lumsden & Tracey Dyks	April 23 2012
0.6	Revision of CRSRS Project Charter	Jim Lumsden & Tracey Dyks	May 04 2012
0.7	Revision of CRSRS Project Charter	Jim Lumsden & Tracey Dyks	May 08 2012
0.8	Major Revision of CRSRS Project Charter	Jim Lumsden, Debbie Timpson, Sabine Mersmann	May 21 2012
0.9	Revision of CRSRS Project Charter	Jim Lumsden	July 13 2012
1.0	Final Draft of CRSRS Project Charter Complete	Jim Lumsden	August 24 2012
1.1	Revision of Final Draft	Jim Lumsden & Debbie Timpson	September 25 2012
1.2	Revision of Final Draft	Jim Lumsden, Debbie Timpson, & Tracey Dyks	October 22 2012
1.3	Revision of Final Draft	Jim Lumsden, Debbie Timpson, Sue Dojeiji	November 21 2012
1.4	Revision of Final Draft	Jim Lumsden, Debbie Timpson, Sue Dojeiji	November 29 2012
1.5	Final version for approval	Jim Lumsden, Debbie Timpson, Sue Dojeiji	December 03 2012
2.0	Final version approved by RNOC & CRSN Steering Committee	Jim Lumsden	January 18 2013 & March 22 2013

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Bibliography

- 1) Biernaskie, J., Chernenko, G., & Corbett, D. (February 4 2004). Efficacy of Rehabilitative Experience Declines with Time after Focal Ischemic Brain Injury. *The Journal of Neuroscience* , 24(5): 1245-1254.
- 2) Canadian Stroke Network. (2011). *Quality of Stroke Care in Canada*.
- 3) Canadian Stroke Strategy. (2010). *Canadian Best Practice Recommendations for Stroke Care*.
- 4) Champlain LHIN. (September 4, 2009). *Integrated Health Services Plan 2010-2013, v 10.0*.
- 5) Drummond, D. (February 2012). *Commission on the Reform of Ontario's Public Services. Public Services for Ontarians: A Path to Sustainability and Excellence*.
- 6) Mittmann, N. S. (June 6-8, 2010). Cost of an Ischemic Stroke Patient in Canada: 6 Month Costs. *1st Canadian Stroke Congress* (p. (abstract & podium presentation)). Quebec City, Quebec: Canadian Stroke Network.
- 7) Ontario Ministry of Health and Long-Term Care. (January 2007). *2006 Levels of Care Classification Report*.
- 8) Ontario Ministry of Health and Long-Term Care. (2012-2013). *Hospital Accountability Planning Submission (HAPS) Guidelines*.
- 9) Ontario Stroke Network. (February 23 2012). *The Impact of Moving to Stroke Rehabilitation Best Practices in Ontario: A Preliminary Report*.
- 10) Walker, D. D. (June 30 2011). *Caring For Our Aging Population and Addressing Alternate Level of Care*.

Appendix A: Champlain ALC Working Group – Sub-Acute Capacity

Champlain ALC Working Group
Sub Acute Capacity
Last updated June 19, 2012

General Inclusion Criteria for all Sub Acute Care
(A patient must meet all of the criteria listed below to qualify for referral to Sub Acute Care)

- Is medically stable*
- Care needs can be met within the available resources of Sub Acute care
- Requires interdisciplinary team
- Has defined and achievable goals
- Weight bearing status is established
(non-weight bearing patients may be accepted if rehab goals exist)
- Is willing and able to participate and has the potential to benefit from the program
- Has adequate tolerance to participate in the program
- Consents to participate in the program
- Discharge options have been discussed with the patient/family
- Needs of the patient can be met by the unit

*A patient is considered medically stable when the following criteria are met:

- 1) Clinical course of the patient is largely predictable;
- 2) A clear diagnosis and co-morbidities have been established;
- 3) At the time of discharge from acute care, acute medical issues have been addressed;
- 4) Disease processes and/or impairments are not precluding participation in the program;
- 5) Patient's vital signs are stable or as expected;
- 6) No *undetermined* medical issues (e.g. excessive shortness of breath, falls, CHF) exist that preclude care in post-acute settings;
- 7) C-PAP, BiPAP settings are stable on ventilated patients;
- 8) Medication needs have been determined;
- 9) Oxygen weaning and trach discontinuation is complete.

Note: Palliative care patients may be excluded from this definition (Champlain LHDN, 2012)

If the patient meets these basic requirements then compare their needs against the program specific inclusion/exclusion criteria below.

General/Short Term Rehab		Specialized Rehab		Complex Continuing Care		Convalescent Care	
95 beds	Avg. LOS ~20 days	154 beds	Avg. LOS ~45.5 days	513 beds	Avg. LOS ~122.5 days	64 beds	Max LOS 90 days
<ul style="list-style-type: none"> • The Ottawa Hospital • Queensway Carleton Hospital • Cornwall Community Hospital • Pembroke Regional Hospital • Hôpital Montfort 		<ul style="list-style-type: none"> • The Ottawa Hospital Rehab Centre <ul style="list-style-type: none"> > ABI Stream > Neuromuscular/SCI Stream > Locomotor Stream > Specialized Stream • Bruyère Continuing Care <ul style="list-style-type: none"> > Geriatric Rehabilitation > Stroke Rehabilitation • Glengarry Memorial Hospital <ul style="list-style-type: none"> > Stroke Rehabilitation 		<ul style="list-style-type: none"> • Bruyère Continuing Care / Saint Vincent Hospital <ul style="list-style-type: none"> > Specialized Complex Care > Transitional Care > Supportive Care > Restorative/ Neuroscience Care • Amprior & District Memorial Hospital • Renfrew Victoria Hospital • St. Joe's Continuing Care Centre • Hawkesbury & District General Hospital • Winchester District Memorial Hospital • Glengarry Memorial Hospital • Kemptville District Hospital • Almonte General Hospital • Pembroke Regional Hospital • St. Francis Memorial Hospital 		<ul style="list-style-type: none"> • Valley Stream Manor • Residence St Louis • Perley Rideau 	

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Catalyst to drive for excellence in stroke care and vascular health

General/Short Term Rehab	Specialized Rehab	Complex Continuing Care	Convalescent Care
<p>Inclusion Criteria</p> <ul style="list-style-type: none"> Meets general inclusion criteria (reverse) 	<p>Inclusion Criteria</p> <ul style="list-style-type: none"> Meets general inclusion criteria (reverse) Has moderate to severe impairment <p>TOHRC ABI</p> <ul style="list-style-type: none"> Has ABI that affects cognitive, behavioural and physical function Has Ranchos Los Amigos Level IV Agrees to refrain from substance abuse <p>TOHRC Neuromuscular/SCI</p> <ul style="list-style-type: none"> Has traumatic/strumatic SCI ASIA A, B, C, D and/or neurological condition <p>Bruvère Geriatric</p> <ul style="list-style-type: none"> Is at least 65 years old Has multi-geriatric conditions Has lost ability to care for self: recent onset Has at least partial weight bearing through affected limb <p>Bruvère Stroke</p> <ul style="list-style-type: none"> Is post acute stroke <p>Glengarry Stroke</p> <ul style="list-style-type: none"> Is post acute stroke 	<p>Inclusion Criteria</p> <ul style="list-style-type: none"> Meets general inclusion criteria (reverse) Has severe impairment Has multiple unpredictable interacting medical conditions Needs cannot be met in the community or in a Long Term Care home <p>Bruvère Restorative/Neuroscience</p> <ul style="list-style-type: none"> Is post acute stroke <p>Bruvère Bariatric</p> <ul style="list-style-type: none"> Weight is more than 350 lbs. and BMI greater than 40 Goal is weight loss and increased level of function <p>Bruvère Wound</p> <ul style="list-style-type: none"> Has one or more stage IV pressure ulcer/wound <p>Bruvère Respiratory</p> <ul style="list-style-type: none"> Has chronic respiratory failure Requires CVAC (on "assist control" mode only) Requires BiPAP for more than 6 hours/day Have no plans to wean from ventilator <p>Bruvère Dialysis</p> <ul style="list-style-type: none"> Has dialysis dependent ESRD 	<p>Inclusion Criteria</p> <ul style="list-style-type: none"> Meets general inclusion criteria (reverse) Meets requirements for Long Term Care <ul style="list-style-type: none"> a) Is 18 years of age or older b) Is insured under the Health Insurance Act c) Care requirements can be met in a Long Term Care home d) Must require at least one of the following <ol style="list-style-type: none"> 24 hour/day nursing care Assistance with activities of daily living Frequent on-site monitoring to ensure safety/well-being Requires a period of time to recover strength, endurance or function and is likely to benefit from a short stay Is expected to be discharged within 90 days Has transportation needs that can be met by ParaTranspo or paid for by the client
<p>Exclusion Criteria</p> <ul style="list-style-type: none"> Requires 1:1 supervision or sitter Requires complex/VAC dressings Undergoing chemotherapy/radiation treatments Requires dialysis/TPN Has tracheotomy Requires PCA pump Requires continuous IV Awaiting Complex Continuing Care or Specialized Rehab 	<p>Exclusion Criteria</p> <ul style="list-style-type: none"> Requires 1:1 supervision or sitter Requires use of restraints Is undergoing chemotherapy/radiation treatments Requires dialysis/TPN Demonstrates cognitive/behaviour concerns Awaiting Specialized Rehab 	<p>Exclusion Criteria</p> <ul style="list-style-type: none"> Requires RN assignment Requires 1:1 supervision or sitter Requires physician intervention more than twice/week or specialist intervention Demonstrates cognitive/behaviour concerns Requires use of ventilator Requires CVAC on "pressure support" mode Requires respite care 	<p>Exclusion Criteria</p> <ul style="list-style-type: none"> Has unmanageable behaviours that cannot be met with a behavioural plan or has a behavioural plan that the site is not able to accommodate Requires permanent placement in Long Term Care, Complex Continuing Care, or Imminent End of Life Care
<p>Exceptions</p> <p>Queenway Carleton Hospital</p> <ul style="list-style-type: none"> Can Accommodate Awaiting Specialized Rehab <p>Pembroke Regional Hospital</p> <ul style="list-style-type: none"> Can Accommodate Requires complex dressings May be able to Accommodate Requires dialysis/TPN May be able to Accommodate Awaiting Specialized Rehab <p>Comwall Community Hospital</p> <ul style="list-style-type: none"> Can Accommodate Complex dressings May be able to Accommodate Requires hemodialysis May be able to Accommodate Awaiting Specialized Rehab <p>Hôpital Montfort</p> <ul style="list-style-type: none"> Can Accommodate Awaiting Specialized Rehab <p>The Ottawa Hospital</p> <ul style="list-style-type: none"> Can Accommodate Requires Complex Dressing (if <30 minutes) Can Accommodate Undergoing oral chemotherapy Can Accommodate Undergoing radiation treatments Can Accommodate Requires dialysis Can Accommodate Has Zimmer splint Can Accommodate Has TLSO brace Can Accommodate Unresolved Medical Issues (if the referring MD is willing to follow the patient to Rehab) Can Accommodate Is non-weight bearing 	<p>Exceptions</p> <p>TOHRC All Programs</p> <ul style="list-style-type: none"> Can Accommodate Requires use of restraints^(allowing a least moderate/severe patient policy) Can Accommodate Requires dialysis/TPN Can Accommodate Is undergoing oral chemo treatments Can Accommodate Requires dressing changes Can Accommodate Requires complex wound treatment Can Accommodate Requires IV antibiotics Can Accommodate Has a well-established ostomy Can Accommodate Has a PICC line Can Accommodate Requires continuous oxygen Can Accommodate Requires tube feeding Can Accommodate Requires pain management Can Accommodate Has a stable tracheotomy Can Accommodate Requires bariatric equipment Can Accommodate Requires laboratory services -Daily^(Mon to Fri) <p>TOHRC ABI</p> <ul style="list-style-type: none"> Can Accommodate Has cognitive/behaviour concerns Can Accommodate Requires 1:1 supervision <p>Bruvère Geriatric</p> <ul style="list-style-type: none"> Can Accommodate Requires continuous oxygen Can Accommodate Requires VAC therapy Can Accommodate Requires IV antibiotics Can Accommodate Requires mechanical or 2-person lift 	<p>Exceptions</p> <p>^{with initial education and training}</p> <p>Bruvère Specialized Complex, Respirator, and Dialysis</p> <ul style="list-style-type: none"> Can Accommodate Has a history of acute visits Can Accommodate Is palliative with treatment goals Can Accommodate Is palliative patients with complex co-morbidities Can Accommodate Requires technology based care Can Accommodate Requires non-invasive ventilator support Can Accommodate Has respiratory illness requiring complex intervention <p>Bruvère Wound</p> <ul style="list-style-type: none"> Can Accommodate Requires specialized wound care <p>St. Joe's</p> <ul style="list-style-type: none"> Can Accommodate Has a history of acute visits Can Accommodate Is palliative with treatment goals Can Accommodate Is palliative patients with complex co-morbidities Can Accommodate Requires non-invasive ventilator support Can Accommodate Has respiratory illness requiring complex intervention Can Accommodate Has a PICC line Can Accommodate Requires specialized wound care Can Accommodate Requires bariatric equipment Can Accommodate Requires dialysis¹ 	<p>Exceptions</p> <p>^{* with initial education & ongoing supplies from CCAC if patient is able to provide their own feed}</p> <p>All Sites</p> <ul style="list-style-type: none"> Can Accommodate Is undergoing chemo treatments Can Accommodate Requires dressing changes Can Accommodate Requires complex wound treatment* Can Accommodate Requires IV antibiotics* Can Accommodate Has a well-established ostomy* Can Accommodate Has a PICC line* Can Accommodate Requires continuous oxygen* Can Accommodate Requires tube feeding** Can Accommodate Requires pain management Can Accommodate Requires laboratory services -Once a week Can Accommodate Has a stable tracheotomy* <p>Valley Stream Manor</p> <ul style="list-style-type: none"> Can Accommodate Requires bariatric equipment <p>Perley Ridgeau</p> <ul style="list-style-type: none"> Can Accommodate Requires laboratory services -Daily^(Mon to Fri) Can Accommodate Requires bariatric equipment

OSN Strategic Directions

Credible leader, strategic partner, and effective advocate for fewer strokes and better outcomes
Catalyst to drive for excellence in stroke care and vascular health