Cornwall Community Hospital
Hôpital communautaire de Cornwall

Community Stroke Rehab
A Pilot Project in SD&G

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I C A R E

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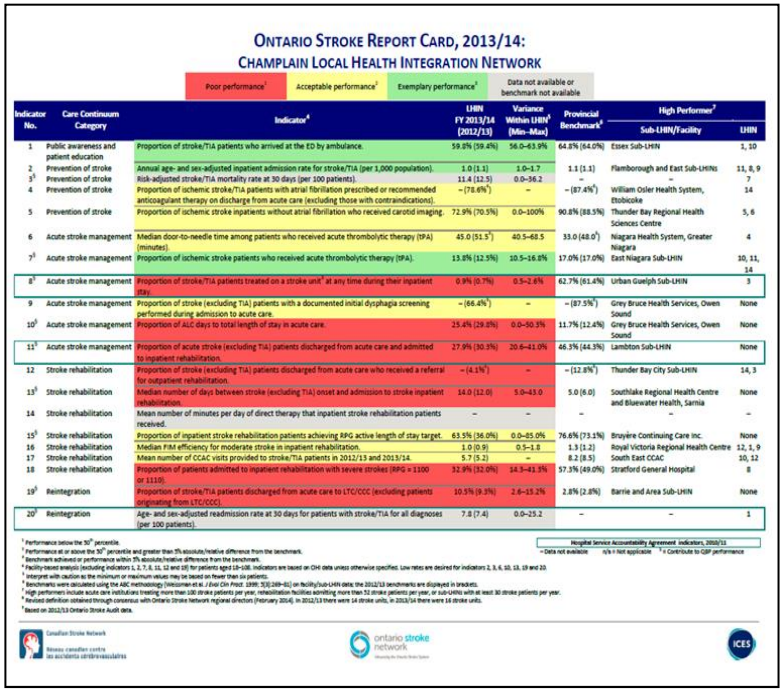


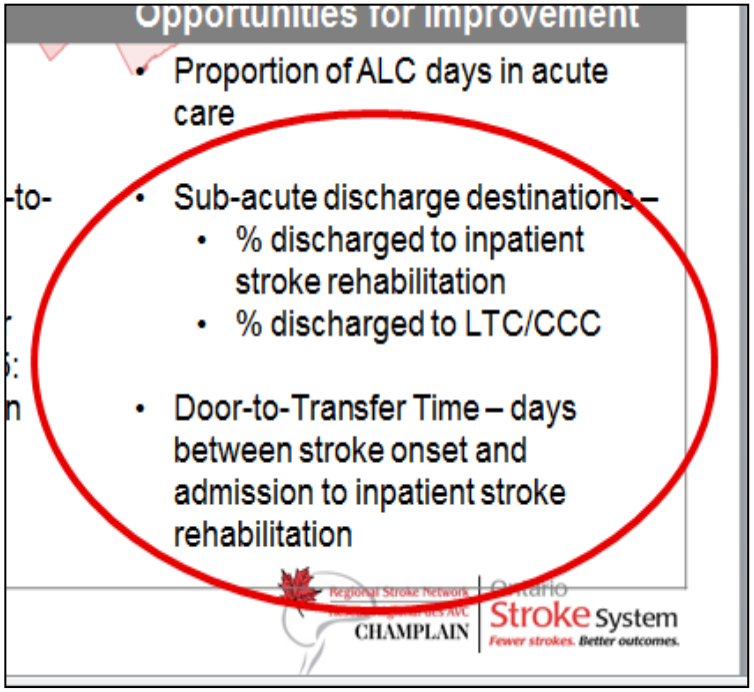
ONTARIO STROKE REPORT CARD, 2013/14:
CHAMPLAIN LOCAL HEALTH INTEGRATION NETWORK

Poor performance[1] | Acceptable performance[2] | Exemplary performance[3] | Data not available or benchmark not available

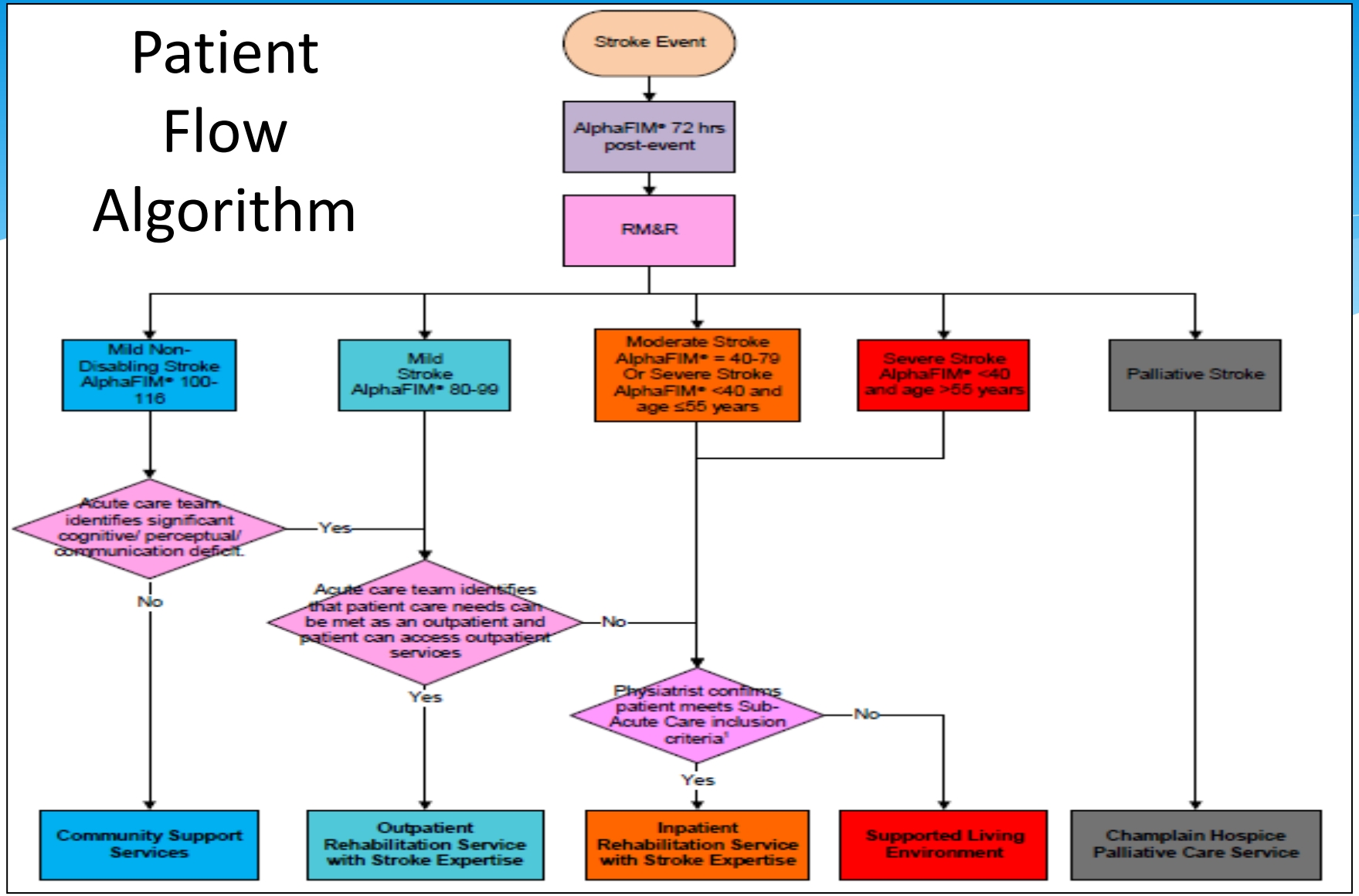
Indicator No.	Care Continuum Category	Indicator[4]	LHIN FY 2013/14 (2012/13)	Variance Within LHIN[5] (Min–Max)	Provincial Benchmark[6]	High Performer[7] Sub-LHIN/Facility	High Performer[7] LHIN
1	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	59.8% (59.4%)	56.0–63.9%	64.8% (64.0%)	Essex Sub-LHIN	1, 10
2	Prevention of stroke	Annual age- and sex-adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.0 (1.1)	1.0–1.7	1.1 (1.1)	Flamborough and East Sub-LHINs	11, 8, 9
3[8]	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	11.4 (12.5)	0.0–56.2	–	–	7
4	Prevention of stroke	Proportion of ischemic stroke/TIA patients with atrial fibrillation prescribed or recommended anticoagulant therapy on discharge from acute care (excluding those with contraindications).	– (78.6%[1])	–	– (87.4%[6])	William Osler Health System, Etobicoke	14
5	Prevention of stroke	Proportion of ischemic stroke inpatients without atrial fibrillation who received carotid imaging.	72.9% (70.5%)	0.0–100%	90.8% (88.5%)	Thunder Bay Regional Health Sciences Centre	5, 6
6	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes).	45.0 (51.5[1])	40.5–68.5	33.0 (48.0[1])	Niagara Health System, Greater Niagara	4
7[9]	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA).	13.8% (12.5%)	10.5–16.8%	17.0% (17.0%)	East Niagara Sub-LHIN	10, 11, 14
8[9]	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit[9] at any time during their inpatient stay.	0.9% (0.7%)	0.5–2.6%	62.7% (61.4%)	Urban Guelph Sub-LHIN	3
9	Acute stroke management	Proportion of stroke (excluding TIA) patients with a documented initial dysphagia screening performed during admission to acute care.	– (66.4%[1])	–	– (87.5%[6])	Grey Bruce Health Services, Owen Sound	None
10[9]	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	25.4% (29.8%)	0.0–50.3%	11.7% (12.4%)	Grey Bruce Health Services, Owen Sound	None
11[9]	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation.	27.9% (30.3%)	20.6–41.0%	46.3% (44.3%)	Lambton Sub-LHIN	None
12	Stroke rehabilitation	Proportion of stroke (excluding TIA) patients discharged from acute care who received a referral for outpatient rehabilitation.	– (4.1%[1])	–	– (12.8%[6])	Thunder Bay City Sub-LHIN	14, 3
13[9]	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	14.0 (12.0)	5.0–43.0	5.0 (6.0)	Southlake Regional Health Centre and Bluewater Health, Sarnia	None
14	Stroke rehabilitation	Mean number of minutes per day of direct therapy that inpatient stroke rehabilitation patients received.	–	–	–	–	–
15[9]	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	63.5% (56.0%)	0.0–85.0%	76.6% (73.1%)	Bruyère Continuing Care Inc.	None
16	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	1.0 (0.9)	0.5–1.8	1.3 (1.2)	Royal Victoria Regional Health Centre	12, 1, 9
17	Stroke rehabilitation	Mean number of CCAC visits provided to stroke/TIA patients in 2012/13 and 2013/14.	5.7 (5.2)	–	8.2 (8.5)	South East CCAC	10, 12
18	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe strokes (RPG = 1100 or 1110).	32.9% (32.0%)	14.3–41.3%	57.3% (49.0%)	Stratford General Hospital	8
19[9]	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	10.5% (9.3%)	2.6–15.2%	2.8% (2.8%)	Barrie and Area Sub-LHIN	None
20[9]	Reintegration	Age- and sex-adjusted readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients).	7.8 (7.4)	0.0–29.2	–	–	1

[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] Facility-based analysis (excluding indicators 1, 2, 7, 8, 11, 12 and 18) for patients aged 18–108. Indicators are based on CIHI data unless otherwise specified. Low rates are desired for indicators 2, 3, 4, 10, 13, 19 and 20.
[5] Interpret with caution as the minimum or maximum values may be based on fewer than six patients.
[6] Benchmarks were calculated using the ABC methodology (Velacoman et al. J Eval Clin Pract. 1999; 5(3):269–81) on facility/sub-LHIN data; the 2012/13 benchmarks are displayed in brackets.
[7] High performers include acute care institutions treating more than 100 stroke patients per year, rehabilitation facilities admitting more than 52 stroke patients per year, or sub-LHINs with at least 30 stroke patients per year.
[8] Revised definition obtained through consensus with Ontario Stroke Network regional directors (February 2014). In 2012/13 there were 14 stroke units, in 2013/14 there were 16 stroke units.
[9] Based on 2012/13 Ontario Stroke Audit data.

Hospital Service Accountability Agreement indicators, 2010/11
– = Data not available | n/a = Not applicable | * = Contributes to QBP performance



Patient Flow Algorithm



(Champlain Regional Stroke Network Presentation November 12, 2015. Presented by Beth Nugent, Interim Director CRSN)

Community Stroke Rehabilitation for Stormont, Dundas, Glengarry & Akwesasne

Rachel Ozer[1], Jeanne Bonnell[2], Chantal Mageau-Pinard[3], JoAnn Tessier[4], Marc Therrien[5], Beth Nugent[1], Tracey Dyks[1], Leah Bartlett[6], Glenda Owens[2], Steve Archer[7], Debbie Timpson[1], Debbie St. John-de Wit[8], Nadia Kucharepa[3], Jim Lumsden[1]

[1]Champlain Regional Stroke Network, [2]Champlain CCAC, [3]Hôpital Glengarry Memorial Hospital, [4]Cornwall Community Hospital, [5]Centre de santé communautaire de l'Estrie, [6]Champlain LHIN, [7]Life After Stroke Support Group-Alexandria, [8]Seaway Valley Community Health Centre

Introduction

- Canadian Best Practice Stroke Recommendations state that stroke survivors with continuing rehabilitation goals should have access to specialized community rehabilitation after leaving the hospital or inpatient rehabilitation[1].
- The Ontario Quality-Based Procedures: Clinical Handbook for Stroke states individuals with residual impairment after stroke should receive therapy services to set goals and improve task—oriented activity[2].
- Community stroke rehabilitation, including therapy in the home, is currently provided across Ontario in the South East, Waterloo Wellington, South West and Hamilton Niagara Haldimand Brant LHINS.
- In Champlain, less than 1/3 of stroke survivors receive a referral to outpatient rehabilitation compared to the provincial benchmark[3].

Objectives

- Short term: pilot community stroke rehabilitation in the SDG-A[1] area to optimize a Champlain service delivery model, improve outcomes for stroke survivors and optimize use of acute and in-patient resources.
- Long term: continue to expand access to outpatient and community stroke rehabilitation services across the Champlain region

Methodology

- The authors of this poster were members of a working group to prepare an HSIP funding proposal to the Champlain LHIN, submitted July 2015.
- The proposal reflected program design that incorporated QBP clinical guidance, the Champlain Regional Stroke Rehabilitation System, approximate budget suggestions from the LHIN and input from stroke survivors and care partners.

[1]SDG-A: Stormont, Dundas, Glengarry & Akwesasne
[2]CSCE: Centre de santé communautaire de l'Estrie
[3] HGMH: Hôpital Glengarry Memorial Hospital

Methodology

- QBP identifies that clinic or congregate settings are preferred over home therapy when possible. Stroke survivors agreed and said it is therapeutic to get out and go to a clinic.
- Home therapy should be offered to those who are too far (more than 30 minutes), not strong enough to travel and do therapy, or can't get transportation to a clinic.
- Community stroke rehabilitation services should be offered by an integrated multi-disciplinary team possessing stroke expertise according to a unified care plan.
- QBP guidance does not limit the amount of therapy given by qualified aides or the use of group sessions in community rehabilitation.
- The target clients recommended by the QBP for outpatient stroke rehabilitation are summarized in Table 1.

Table 1: Clients Recommended to Receive Outpatient Rehab[4]

Patient Group	Characteristics	Care Pathway
Mild Stroke	AlphaFIM® score 81-116, without other major complications	Acute care, then outpatient or community rehabilitation
Moderate Stroke	AlphaFIM® score 41-80 or higher with complications (age, cognitive issues, severe aphasia, others)	Acute care, inpatient rehabilitation, then outpatient or community rehabilitation
Severe Stroke	AlphaFIM® <41	Acute care then possibly inpatient rehabilitation or CCC followed by inpatient rehabilitation then outatient rehabilitation in community or LTC

According to QBP, almost all stroke patients discharged to community should receive rehab subject to criteria. Example: criteria for admission to Bruyere ambulatory rehabilitation: medically stable, potential to progress, ability to learn and retain information, endurance/tolerance of 30 – 60 min therapy plus travel time 2-3 times per week.

Lower endurance could be treated in the home.

Results

- Dedicated clinic space (3 examining rooms & scheduled use of the community room) was identified at CSCE[2]. Therapy will also be available at HGMH[3] rehab facility including pool as well as in client homes.
- CCAC was identified as the lead agency and staffing organization with ability to accommodate small and variable program volumes. Using dedicated funding, team will implement stroke specialized care including expanded care coordinator role and interprofessional team meetings.
- Expected client profiles were based on peer programs to make projected care plans and proposed budget. Annual SDG-A clients are estimated at 60 cases. (Figure 1). Treatment plans are consistent with QBP guidance.
- The maximum projected service plan (client type 1) would see PT and OT weekly, PT-A and OT-A weekly, and S-LP twice weekly for eight weeks as well as SW or nursing at beginning, middle and end of pathway for total of 51 sessions in 8 weeks.

Figure 1: Expected Rehab Service Needs for Budgeting Projections

Client Type	Services	Percentage based on peer programs	Expected SDG-A Annual Clients	Visits OT	Visits PT	Visits SLP	Visits SW or Nurse	Visits Aides	Total Visits Therapists	Pathway Total Visits
1	OT, PT, SLP, SW	18%	11	8	8	16	3	16	35	51
2	OT, PT, SLP	28%	17	8	8	16	0	16	32	48
3	OT, PT, SW	12%	7	8	8	0	3	16	16	35
4	OT, PT	18%	11	8	8	0	0	16	16	32
5	OT, SLP, SW	4%	2	8	0	16	3	8	27	35
6	OT, SLP	7%	4	8	0	16	0	8	24	32
7	OT, SW	3%	2	8	0	0	3	8	8	16
8	OT	5%	3	8	0	0	0	8	8	16
9	PT, SLP, SW	1%	1	0	8	16	3	8	35	51
10	PT, SLP	1%	1	0	8	16	0	8	32	48
11	PT, SW	1%	1	0	8	0	3	8	8	16
12	PT	1%	0	0	8	0	0	8	8	16
13	SLP, SW	0%	0	0	0	12	3	0	15	15
14	SLP	0%	0	0	0	12	0	0	12	12

- Client/family focus groups were held in Cornwall (English) and Alexandria (French). Both groups strongly expressed that arriving home from inpatient treatment was very difficult. Outpatient rehab is needed to improve function in the community setting and identify reintegration strategies.
- Client priorities led the budget planning in the direction of shorter pathways (8 weeks instead of 10 or 12) in order to support access as recommended by QBP for all stroke survivors in SDG-A area.

Conclusions

- A feasible plan consistent with QBP guidance was developed for community stroke rehab in the SDG-A area.
- Champlain LHIN funded the pilot project for service to be delivered from Jan. 2016 – March 2017. Implementation is currently underway.
- CRSN will contribute evaluation to support expansion of similar services throughout Champlain region.
- Client and family engagement was an important part of setting priorities to resolve the tension between quality, access and cost.

Visions for our Future

Above: stroke rehab OT at HGMH
Right top: Aqua rehab HGMH
Right bottom: Future clinic site CSCE

References

1. Canadian Best Practice Stroke Recommendations, 4th Edition 2012-2013 UPDATE July 10, 2013 Section 5.4.
2. Quality-Based Procedures: Clinical Handbook for Stroke (Acute and Post Acute), February 2015, Section 9.1.
3. Ontario Stroke Evaluation Report 2014: On Target for Stroke Prevention and Care, Ontario Stroke Report Card, 2012/13 Champlain Local Health Integration Network
4. Quality-Based Procedures: Clinical Handbook for Stroke (Acute and Post Acute), February 2015, p. 28.

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Champlain CCAC Community Care Access Centre
Champlain CASC Centre d'accès aux soins communautaires de Champlain

Community Stroke Rehabilitation Program

Jeanne Bonnell, Program Manager
Dorothy Kessler, Project Manager

Champlain CCAC

Program Overview

- Specialized outpatient stroke rehabilitation service
- Provides intensive, time-limited rehabilitation
- Focus on individual client goals and integration into community programs and services.
- Professional services:
  - Care coordination
  - Nursing
  - Occupational therapy
  - Physiotherapy
  - Communication therapy
  - Social Work
- Clients receive therapy1-2 times/week for up to 8 weeks in a clinic setting Cornwall (Centre de Santé Communautaire de l'Estrie) or in their homes

Admission Criteria

* Diagnosis of recent stroke
* Discharged from hospital and residing within the Stormont, Dundas, Glengarry region and Akwesasne (Ontario) area
* Discharge to home or a Retirement Home
* Medically stable
* As a guideline, clients admitted directly from acute care should have a discharge AlphaFIM® > 80.
* Ability to learn and retain information

Admission Criteria

* Potential to progress
* Endurance/tolerance of 30 – 60 min of therapy
* Able to identify goals related to functioning at home or in the community, willingness to participate
* Able to attend therapy alone or a caregiver is available to attend therapy sessions if assistance is required
* Potential to travel to clinic for some therapy

Referral Process

* Ensure the patient meets all of the above admission criteria
* Complete a CCAC referral form

  a. Under “Relevant Diagnosis/Information for referral”, indicate Community Stroke Rehabilitation Program and specify therapy discipline(s) required

  b. Include relevant discipline reports and contact information.
* Fax referral to Hospital Portal (regular hospital CCAC fax number) between 8 am -3 pm Monday to Friday

Next Steps

* Go live – January 18-25
* Communication
  * CCAC Information sheets (English/French)
  * Presentation to stakeholders
* Evaluation
  * Short term – monthly
  * Long term – every 6 months/yearly