STROKE NETWORK *of* Southeastern Ontario

Regional & Provincial Context: (R)Evolutions in Stroke Care Improvements; How Does "Bundled Care" Fit?

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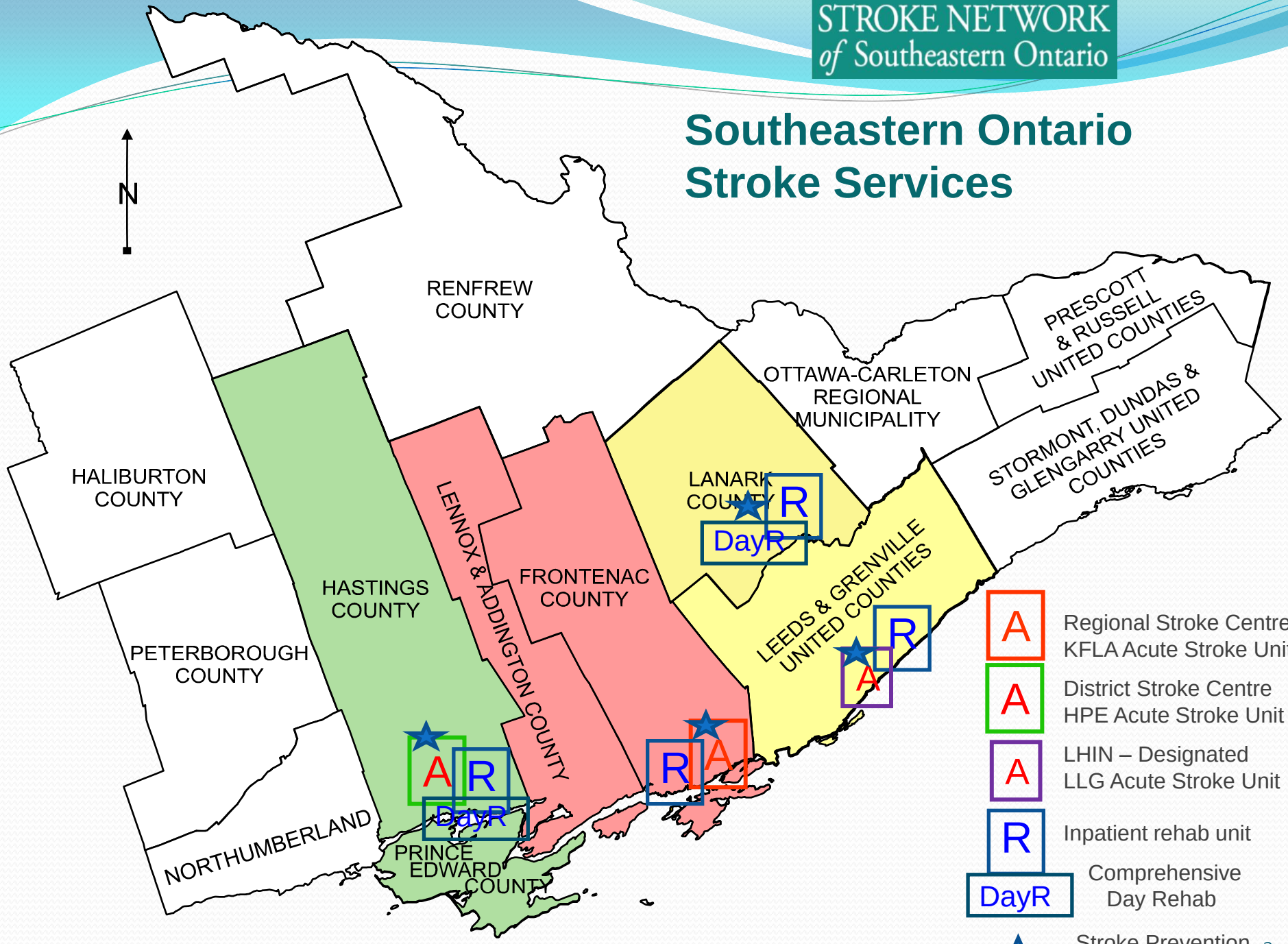
Southeastern Ontario Stroke Services



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Equal Access to Quality Stroke Care in Stroke Survivor Dan's Words:

"This means care is ALL ONE COLOUR to me"

Dr. Dan Brouillard

South East Stroke Report Card

Growing Volumes

Acute ALC

Onset to Rehab

Flow thru Rehab

Ontario Stroke Report Card, 2017/18:
South East Local Health Integration Network

CorHealthOntario.ca

● Exemplary performance[1] ■ Acceptable performance[2] ▲ Poor performance[3] ☐ Data not available or benchmark not available

Indicator No.	Care Continuum Category	Indicator[4]	LHIN FY 2017/18 (2016/17)	Variance Within LHIN[5] (Min–Max)	Provincial Benchmark[6]	High Performers[7]	
						Sub-region/Facility	LHIN
1 ▲	Public awareness and patient education	Proportion of stroke/TIA patients who arrived at the ED by ambulance.	58.7% (62.0%)	57.8 - 59.3%	65.9%	Western Champlain sub-region	1, 11
2 ▲	Prevention of stroke	Annual age- and sex-adjusted inpatient admission rate for stroke/TIA (per 1,000 population).	1.6 (1.5)	1.4 - 1.8	1.1	Oakville sub-region	7, 8, 6
3§ ☐	Prevention of stroke	Risk-adjusted stroke/TIA mortality rate at 30 days (per 100 patients).	12.2 (11.1)	9.5 - 28.1	-	-	11
4 ▲	Prevention of stroke	Proportion of ischemic stroke/TIA inpatients aged 65 and older with atrial fibrillation who filled a prescription for anticoagulant therapy within 90 days of discharge from acute care.	71.0% (67.8%)	62.5 - 86.7%	85.6%	East Mississauga sub-region	5, 12
5 ■	Prevention of stroke	Proportion of ischemic stroke inpatients who received carotid imaging.	83.3% (85.3%)	33.3 - 92.6%	93.0%	Thunder Bay Regional Health Sciences Centre	14, 3
6 ●	Acute stroke management	Median door-to-needle time among patients who received acute thrombolytic therapy (tPA) (minutes). Target*: 30 minutes	31.5 (42.0)	24.0 - 65.0	33.0	Kingston Health Sciences Centre – Kingston General Site	10
7§ ●	Acute stroke management	Proportion of ischemic stroke patients who received acute thrombolytic therapy (tPA). Target*: >12%	14.4% (15.1%)	9.8 - 21.8%	17.7%	London Middlesex sub-region	11, 4
8§ ●	Acute stroke management	Proportion of stroke/TIA patients treated on a stroke unit[9] at any time during their inpatient stay. Target*: >75%	80.5% (76.7%)	74.8 - 88.8%	81.8%	Quinte sub-region	3, 10
9 ■	Prevention of stroke	Proportion of ischemic stroke/TIA patients discharged from the ED and referred to secondary prevention services.	79.1% (74.7%)	0.0 - 100.0%	95.1%	Hamilton Health Sciences Corp - Juravinski	None
10§ ▲	Acute stroke management	Proportion of ALC days to total length of stay in acute care.	33.0 (32.1)	0.0 - 72.8%	8.2%	Bluewater Health, Sarnia	3
11§ ▲	Acute stroke management	Proportion of acute stroke (excluding TIA) patients discharged from acute care and admitted to inpatient rehabilitation. Target*: >30%	30.2% (27.9%)	14.5 - 36.0%	47.8%	Lambton sub-region	1
12§ ☐	Stroke rehabilitation	Proportion of acute stroke (excluding TIA) patients with mild disability (AlphaFIM > 80) discharged home.	75.9% (80.0%)	73.9 - 84.1%	*	*	14, 3
13§ ▲	Stroke rehabilitation	Median number of days between stroke (excluding TIA) onset and admission to stroke inpatient rehabilitation.	11.0 (11.0)	4.0 - 15.0	5.0	Quinte Health Care – Belleville General Site	None
14§ ■	Stroke rehabilitation	Median number of minutes per day of direct therapy received by inpatient stroke rehabilitation patients. Target*: 180 minutes/day	74.9 (71.5)	72.4 - 80.0	107.6	West Park Healthcare Centre	None
15§ ▲	Stroke rehabilitation	Proportion of inpatient stroke rehabilitation patients achieving RPG active length of stay target.	50.7% (51.3%)	40.0 - 62.4%	86.6%	Providence Healthcare	12
16 ▲	Stroke rehabilitation	Median FIM efficiency for moderate stroke in inpatient rehabilitation.	1.0 (0.9)	0.8 - 1.6	1.6	Providence Healthcare	3, 12
17 ●	Stroke rehabilitation	Mean number of home and community care rehab visits provided to stroke patients on discharge from inpatient acute care or inpatient rehabilitation in 2016/17-2017/18.	15.3 (12.9)	-	13.1	South East Home and Community Care	10, 3
18§ ▲	Stroke rehabilitation	Proportion of patients admitted to inpatient rehabilitation with severe stroke (RPG 1100 or 1110).	35.7% (45.7%)	20.0 - 40.9%	56.2%	Grand River Hospital Corp-Freeport Site	None
19§ ■	Reintegration	Proportion of stroke/TIA patients discharged from acute care to LTC/CCC (excluding patients originating from LTC/CCC).	3.9% (6.4%)	1.0 - 6.5%	1.9%	Guelph-Puslinch sub-region	None
20§ ☐	Reintegration	Age- and sex-adjusted readmission rate at 30 days for patients with stroke/TIA for all diagnoses (per 100 patients). Target*: 10.0	6.6 (5.1)	5.2 - 11.0	-	-	10

*Benchmark has not been specified for this indicator.

Hospital Service Accountability Agreement indicator, 2015/16

- Data not available

§ Contributes to QBP performance

[1] Benchmark achieved or performance within 5% absolute/relative difference from the benchmark.
[2] Performance at or above the 50th percentile and greater than 5% absolute/relative difference from the benchmark.
[3] Performance below the 50th percentile.
[4] Facility-based analysis (excluding indicators 1, 2, 4, 7, 8, 11 and 19) for patients aged 18–108. Indicators are based on CIHI data. Low rates are desired for indicators 2, 3, 6, 10, 13, 19 and 20.
[5] Excludes sub-regions or facilities with fewer than six patients.
[6] Top benchmark achieved between 2015/16 and 2017/18. Benchmarks were calculated using the ABC methodology (Weissman et al. J Eval Clin Pract 1999; 5(3):269–81) on sub-region or facility data.
[7] Sub-region/Facility: Highest performer among acute care institutions treating more than 100 stroke patients per year, rehabilitation facilities admitting more than 62 stroke patients per year, or sub-regions with at least 30 stroke patients per year. LHIN: Top two with exemplary performance.
[8] Targets based on international, national and provincial targets, please refer to full report for details.
[9] The revised definition was developed with the consensus of Ontario Stroke Network regional directors (February 2014). There were 16 stroke units in 2013/14, 21 in 2014/15, 28 in 2015/16, 35 in 2016/17, and 39 in 2017/18

CorHealth Ontario

SE Stroke Report & Progress Cards

Strong hyperacute and acute performance

Strong Community Stroke Rehab Program

Low % discharged to LTC

Low readmission rates

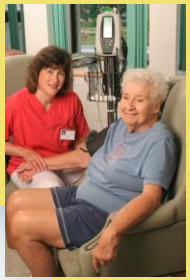
High and growing stroke volumes – need prevention

Challenges in flow to rehab & through rehab

Persisting ALC rates

Best Practice Stroke Care along the Patient Journey

Prevention | **Emergency Care** | **Acute Care** | **Rehabilitation** | **Community Services**





GO

GO

Capacity !!!

GO

GO

Growing Volumes!!!

GO

Equal Access to Quality Stroke Care

Fewer strokes. Better outcomes.

Regional Stroke Workplan Priorities 2019-2021

1. Primary and Secondary prevention- links
2. Hyperacute care: EVT and Thrombolysis
3. **Support Bundled Funding: Acute to Rehab to Community Transitions**
4. Sustain gains; continue to build expertise and capacity (e.g. Prevention, Acute Stroke Units, Rehab, Community Supports)

CorHealth Ontario

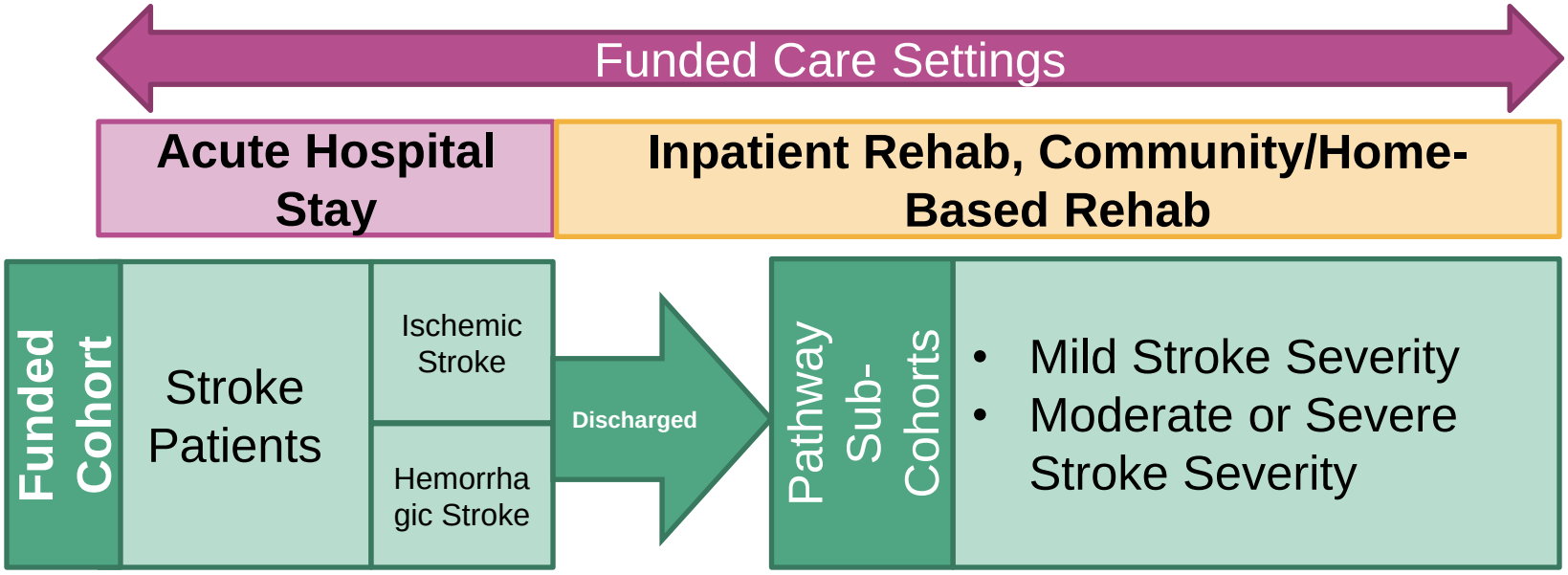
Advancing cardiac, stroke and vascular care

Stroke Bundled Funding
Resource Deck

June 20th, 2019

Proposed Stroke Bundle
Scope of Bundled Care Pathway

- Proposed funded cohort, sub-cohorts, and the care settings included in the bundle



- Proposed bundle duration: **up to 6 months**
  - ~8-10 days acute LOS + 48.9 days IP rehab[1] + 12 weeks (84 days) community rehab[2]

[1]QBP Handbook (4.4.1) [2]QBP Handbook (9.5-9.7).

Provincial Work in Progress: Stroke care recommendations on key decision points and minimum requirements

- **Implementation date? – Key message: GET READY**
- **Criteria & Guidelines to Align with QBP Handbook and Canadian Stroke Best Practice Recommendations**
- **Transfers of Stroke Patients between Acute Hospitals**
- **Acute Stroke Care: Minimum Requirements/Core Elements**
- **Stroke Rehabilitation: Minimum Requirements/Core Elements**
- **Complex Continuing Care versus Rehabilitation??**
- **NACRS lite to monitor outpatient rehabilitation**

DRAFT Recommended Criteria & Guidelines For Stroke Bundle Holders & Participants - ACUTE

Recommended Key Elements & Requirements for *Acute Inpatient Stroke Care* for Successful Implementation of the Bundle:

Acute Care:

- **Stroke Unit**
  - All confirmed stroke patients should be **admitted to a designated stroke unit[1]** as soon as possible (ideally within 24 hours of hospital arrival).
  - The stroke team should consist of a **dedicated[2] interprofessional stroke team with expertise** in stroke care inclusive of MD, nursing, OT, PT, SLP, SW, RD.
  - Complete **initial assessment within 24-48 hours** of admission using appropriate validated tools.
  - To optimize outcomes & efficiencies, admitted stroke volumes should be *at least* **125 stroke patients/year/institution** for acute stroke units and *at least* 100 stroke patients/year/institution for integrated stroke units (a specialized IP stroke unit providing both acute and rehabilitation services).
    - Stroke Unit volume requirements include all stroke patients, including ischemic and hemorrhagic stroke, EVT and TIA (i.e., Special Project 340 in the DAD)
- **Stroke Team Availability**
  - The core Interprofessional Stroke Team with expertise in stroke care available **7 days/week** (at minimum MD, nursing, OT, PT, SLP); This is recommended best practice, and recognized while not currently consistently available across the province, it is important for timely care and achieving efficiencies.
- **Assessment**
  - **AlphaFIM®** should be completed on or **by day 3 after admission** (target day 3, admission day is day 1) and **referral to rehabilitation** should occur as soon as appropriate, **targeting day 4** or earlier (inpatient, or community-based [outpatient, in-home, or ESD])
- **Education, cross continuum prevention assessment and care coordination**
  - Ongoing interprofessional patient/family education to support transitions and risk factor management
  - Arrange appointments (information shared verbally and in writing prior to discharge) as appropriate for diagnostics, outpatient care, Stroke Prevention Clinic, Primary Care Provider (PCP), other follow up required

[1]A geographical unit with identifiable co-located beds (eg 5A -7, 5A-8, 5A-9, 5A-10, 5A-11) that are occupied by stroke patients 75% of the time and has a dedicated inter-professional team with expertise in stroke care with the following professionals at a minimum nursing, physiotherapy, occupational therapy, speech language pathologist"
[2]Individuals who spend the vast majority of their time treating stroke patients and regularly complete education about stroke care

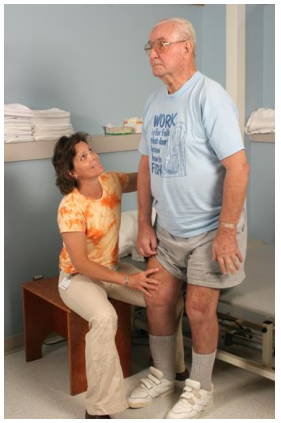
DRAFT Recommended Criteria & Guidelines For Stroke Bundle Holders & Participants- REHAB

Recommended Key Elements & Requirements for *Rehabilitation (Post-Acute Care)* for Successful Implementation of the Bundle:

Rehabilitation (Post-Acute Care):

Timely Access

- In collaboration with the acute provider, rehabilitation should begin **as early as possible** after medical stability is reached



Inpatient Rehab

- Acute ischemic stroke: **6 days** from acute admission
- Hemorrhagic stroke: **8 days** from acute admission

Outpatient Rehab

- Within **48 hours** of discharge from acute hospital
- Within **72 hours** of discharge from inpatient rehabilitation

Specialized Rehabilitation Services/Facilities

- During inpatient rehabilitation, care should be formally coordinated and organized on a geographically defined, **specialized stroke rehabilitation unit**. Where not available, a mixed unit would be accepted.
- A **dedicated interprofessional rehabilitation team** with stroke expertise should be available to support inpatient and community (home based and outpatient) rehabilitation services (minimum MD, RN, OT, PT, SLP, SW, RD).

DRAFT Recommended Criteria & Guidelines For Stroke Bundle Holders & Participants- REHAB

Recommended Key Elements & Requirements for *Rehabilitation (Post-Acute Care)* for Successful Implementation of the Bundle:

Rehabilitation (Post-Acute Care):

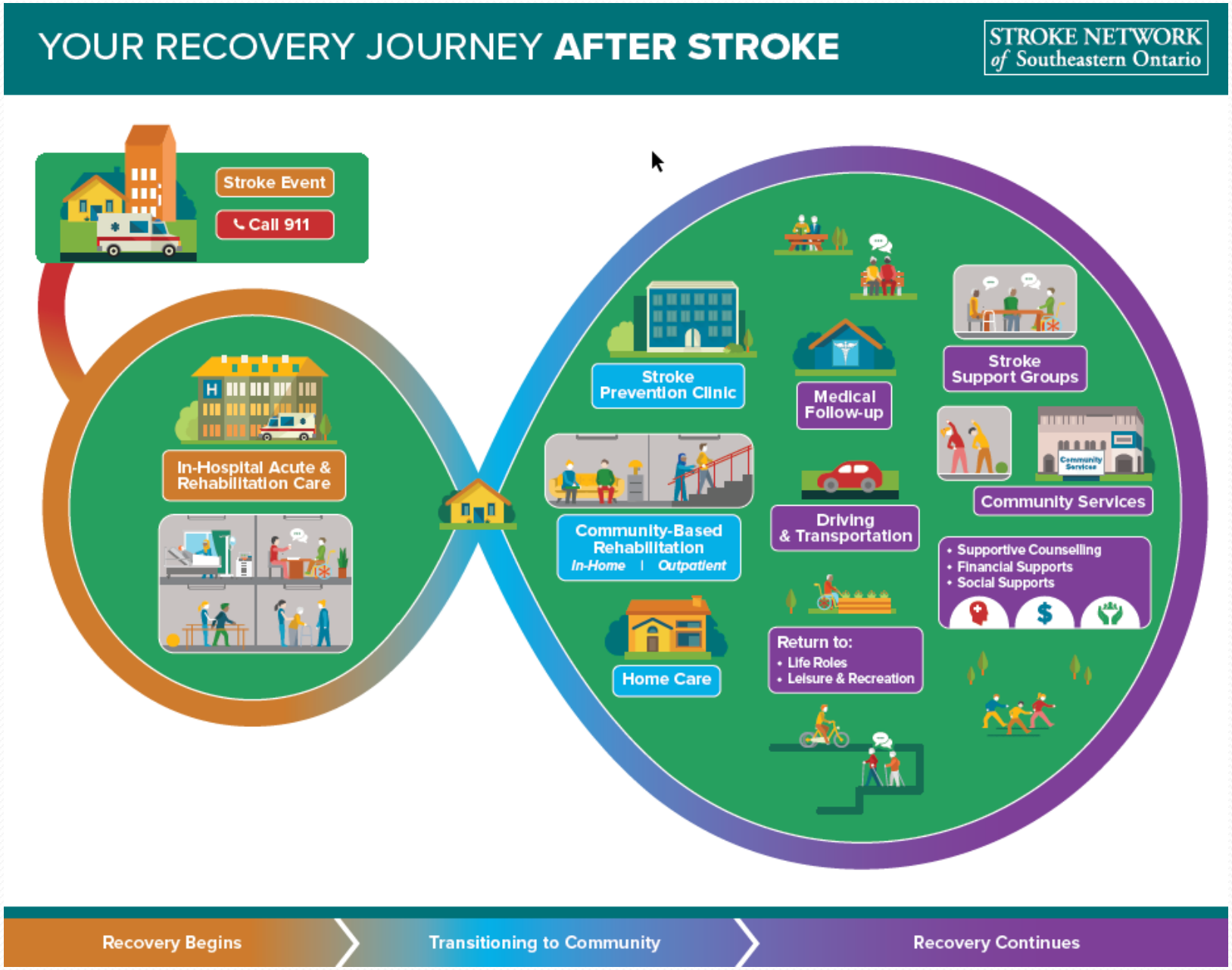
Rehabilitation Therapy

- Patients post-stroke should have access to participate in intensive, goal-directed one-on-one therapy to meet functional needs
- **Appropriate Intensity** should be provided to patients:
- **Inpatient Rehab**
  - 3 hours/day, ≥6 days/week
- **Community Based Rehab (Outpatient or Home-Based Rehab)**
  - 2-3 visits (per required discipline)/week, 8-12 weeks; 45 minutes/day/discipline
- **Early Supported Discharge**
  - 5 days/week at the same level of intensity as they would have received in the inpatient setting (i.e. 3 hours/day shared between disciplines). The duration of intervention offered as ESD should be based on patient needs and the existence and type of other community-based stroke services operating in the area (approximately 2-4 weeks)

Cross-continuum prevention assessment and care coordination

- Ongoing interprofessional patient/family education to support transitions and risk factor management
- Arrange appointments (information shared verbally and in writing prior to discharge) as appropriate for further diagnostics, outpatient care, Stroke Prevention Clinic, Primary Care Provider (PCP), other follow up required

The Future: Navigation through Less Roadblocks?



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What will the next (R)Evolution mean to stroke patients?

www.strokenetworkseo.ca

www.strokebestpractices.ca

THANK YOU!