

Integrated Stroke Unit

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**Brockville
General Hospital**
Right here, with you.

ISU Patients

- Types of CVAs & volumes
- Benefits
- Disposition options
- Discharge process
- Follow-up post-acute stroke

Integrated Stroke Unit

- Opened on October 12, 2021
- 12-bed unit
- Supported by a skilled multidisciplinary team including stroke coordinator, SW, PT, OT, SLP, RNs/RPNs



Why is a Stroke Unit Important?

“Getting to the stroke unit made all the difference- I knew I could relax a bit knowing [family member] was well cared for.”

A person who experiences a stroke is more likely to survive, recover, and return home when early stroke care is provided by a specialized team in an **Acute Stroke Unit**. Ontario Health - CorHealth Ontario has been leading a provincial project on Stroke Unit Care.

Who is admitted?

- Acute CVA outside window for TNK or EVT
- High-risk TIA
- Repatriations from KHSC

From where?

- Direct admission from PSFDH ER
- PSFDH patient transfer from tertiary care +/- interventions who require ongoing ISU care

Volume of Stroke Admissions

- 187 total
 - Ischemic: 143
 - Hemorrhagic: 14
 - High-risk TIA: 30
- 143 patients from BGH and 44 patients from PSFDH

Benefits of an ISU

- Geographical area within hospital is designated for the ISU
- Physician order set including investigations
- Nursing best practice stroke pathway
- Identify risk factors and goals for recovery
- Reduced morbidity and mortality
- Reduced complications

<p>Admit</p> <p><input type="checkbox"/> Unit: Medical (Stroke Unit)</p> <p><input type="checkbox"/> Telemetry Application</p> <p>Diet</p> <p><input type="checkbox"/> NPO (Until Swallowing Assessment)</p> <p><input type="checkbox"/> Regular - DAT</p> <p><input type="checkbox"/> Clear Fluids</p> <p><input type="checkbox"/> Diabetic</p> <p><input type="checkbox"/> Cardiac</p> <p><input type="checkbox"/> Diet Other</p> <p>Activity</p> <p><input type="checkbox"/> AAT (with early ambulation)</p> <p><input type="checkbox"/> AAT (Mobilize within 24 hours)</p> <p><input type="checkbox"/> Bedrest</p> <p><input type="checkbox"/> Other</p> <p>Vital Signs</p> <p><input checked="" type="checkbox"/> FI02: nasal oxygen to maintain O2 saturation >89%</p> <p><input type="checkbox"/> Incentive Spirometry now</p> <p><input checked="" type="checkbox"/> Vital Signs every 4 hours and as needed x 48 hours then every shif...</p> <p><input type="checkbox"/> Vital Signs every 2 hours and as needed</p> <p><input type="checkbox"/> Vital Signs every 4 hours and as needed</p>	<p>Neuro Vital Signs</p> <p>If patient is alert or drowsy follow orders for CNS (Canadian Neurolo...</p> <p><input type="checkbox"/> CNS every 1 hour x 4 (if patient is in Emergency Department)</p> <p><input checked="" type="checkbox"/> CNS every 4 hours and as needed x 48 hours then every shift and ...</p> <p><input type="checkbox"/> CNS every 2 hours and as needed x 24 hours</p> <p><input type="checkbox"/> CNS every shift and as needed; Start in 48 hours</p> <p>If patient is comatose or obtunded order GCS (Glasgow Coma Scal...</p> <p><input type="checkbox"/> GCS - Stroke Neuro Vitals every 1 hour x 4 (If patient is in Emergen...</p> <p><input type="checkbox"/> GCS - Stroke Neuro Vital Signs every 4 hours and as needed x 48 ...</p> <p><input type="checkbox"/> GCS - Stroke Neuro Vital Signs every 2 hours and as needed x 24 ...</p> <p><input type="checkbox"/> GCS - Stroke Neuro Vital Signs every shift and as needed; Start in ...</p> <p>Investigations</p> <p><input type="checkbox"/> Laboratory: Routine Panel daily x 3</p> <p><input type="checkbox"/> Troponin (daily x 3)</p> <p><input type="checkbox"/> PT (INR) today</p> <p><input type="checkbox"/> PTT (Partial Thromboplastin Time) today</p> <p><input type="checkbox"/> HbA1C (Hemoglobin A1C) tomorrow morning</p> <p><input type="checkbox"/> Lipid Panel tomorrow am</p> <p><input type="checkbox"/> POC Glucose 4 times per day x 72 hours; then reassess</p> <p><input type="checkbox"/> Laboratory: Vasculitis/Inflammatory Disease Screen</p> <p>Diagnostic Imaging</p>	<p><input type="checkbox"/> Diagnostics (Imaging/Cardio) - TIA Stroke</p> <p>Urinary Catheter Protocol</p> <p><input type="checkbox"/> Foley Catheter Insertion</p> <p><input type="checkbox"/> Foley Catheter Insertion as needed (Intermittent) As per Bladder Pr...</p> <p>Consults</p> <p><input type="checkbox"/> Consults- Stroke</p> <p>VTE Prophylaxis (QBP)</p> <p>If CrCl > 29 mL/min choose:</p> <p><input type="checkbox"/> Enoxaparin 40 mg subcut every 24 hours</p> <p>If CrCl < 30 mL/min choose:</p> <p><input type="checkbox"/> Enoxaparin 30 mg subcut every 24 hours</p> <p>Heparin</p> <p><input type="checkbox"/> Heparin 5000 units subcut every 12 hours (CrCl less than 30) Start...</p> <p>Medications; Routine</p> <p><input type="checkbox"/> Antiplatelet Agents</p> <p>Statin Therapy PO</p> <p><input type="checkbox"/> Atorvastatin 40 mg PO daily at bedtime</p> <p><input type="checkbox"/> Rosuvastatin 20 mg PO daily at bedtime</p> <p>Statin Therapy Via Tube</p> <p><input type="checkbox"/> Atorvastatin 40 mg via tube daily at bedtime</p>	<p><input type="checkbox"/> R</p> <p><input type="checkbox"/> Hyp</p> <p><input type="checkbox"/> P</p> <p><input type="checkbox"/> Hyp</p> <p><input type="checkbox"/> P</p> <p><input type="checkbox"/> Anti</p> <p><input type="checkbox"/> Ana</p> <p><input type="checkbox"/> Bow</p> <p><input type="checkbox"/> Sed</p> <p><input type="checkbox"/> Intra</p> <p><input type="checkbox"/> S</p> <p><input type="checkbox"/> S</p> <p><input type="checkbox"/> Trea</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
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Save Order Set to Favorites Save Selected Orders to Favorites Add Order Clear Orders Return

AlphaFIM® Instrument for Stroke

What is it?

AlphaFIM® Instrument

- Standardized method of assessing patient **disability/functional status** in the acute care setting
- Consists of six items that can be reliably collected in acute care
- Facilitates the transfer of patients from acute care to rehabilitation by using common language

AlphaFIM® Components

6 Items are rated:

MOTOR

1. Toilet Transfer
2. Bowel Management

If patient walks <150 feet: If patient walks ≥150 feet:

3. Eating
4. Grooming
3. Walking
4. Bed Transfer

COGNITION

5. Expression
6. Memory

Rating Method:

7 – Complete independence (timely, safely)	No Helper
6 – Modified independence (device)	No Helper
Modified Dependence	
5 – Supervision	Helper
4 – Minimal Assist (Subject ≥ 75%)	
3 – Moderate Assist (Subject = 50 - 74%)	
Complete Dependence	
2 – Maximal Assist (Subject = 25 - 49%)	
1 – Total Assist (Subject <25%)	

Triage Guidelines*

AlphaFIM® Rating		Recommended Referral
Mild	> 80	Community-based rehabilitation
Moderate	40 to 80	Inpatient rehabilitation
Severe	< 40	Restorative care with regular assessment for rehab potential

*AlphaFIM® rating is only **one** component for consideration in discharge planning.

Further AlphaFIM® info:

For further information on the AlphaFIM® Instrument please contact the Ontario Stroke Network at:
www.ontariostrokenetwork.ca
 or
info@ontariostrokenetwork.ca

Who Completes it?

Acute Care Allied Health and Nursing Assessors must be credentialed; but all team members may be consulted for information gathering.

When: Day 3 post admission

Benefits

- Utilize a common language for functional status and rehabilitation needs
- Provide objective data regarding disability and stroke severity
- Facilitate transfer of information to inpatient stroke rehabilitation
- Help make decisions regarding discharge from acute care
 - amount of help needed
 - best destination

What it Provides:

- Standardized Measure of Stroke Severity and Function
- Motor and Cognitive rating
- Projected FIM® ratings*
- Help Needed (in hours per day)



Acute to Rehab

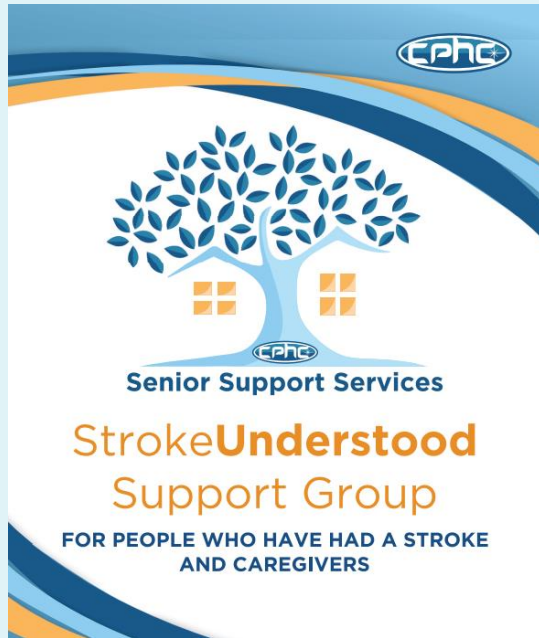
- FIM 40-80 (moderate)
- FIM < 40 (severe): trial of Rehab vs CMM
- 31.1% are transitioned to the BGH Rehab unit

Acute to Community

- FIM > 80 (mild)
- Community-based Rehab via HCCSS
- Consider pre-home OT assessment
- Referral to peer stroke support
- PSFDH: day hospital

Post acute for PSFDH pt.'s

- **Discharge home** – with referrals to Home and Community Care and/or Day Hospital
- **Rehab @ PSFDH** – contact occurs with Dr. Stolee to discuss rehab readiness for consideration of direct admission to rehab
- **Repatriation** for ongoing medical care if patient is not appropriate for rehab



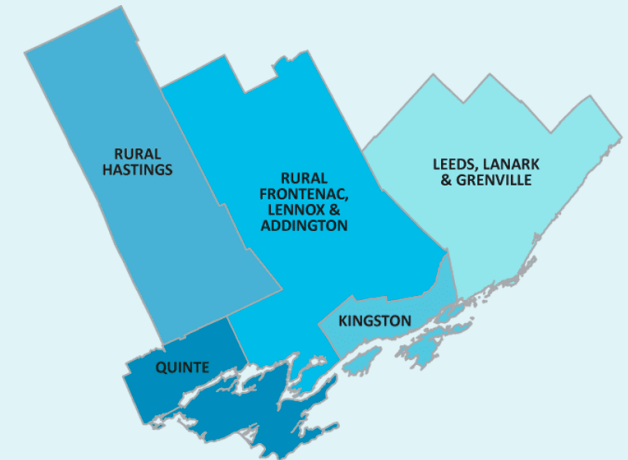
Referrals

Day Hospital



**The Vascular Protection Clinic
Referral Form**
Phone: (613) 267-1500 ext. 4263
Fax: (613) 267-3449

**HOME AND COMMUNITY CARE
SUPPORT SERVICES**
South East



Discharge from ISU

- MD discharge summary includes results of: investigations, medications initiated, driving, etc
- Include instructions for any FP follow-up; Holter results, antiplatelet therapy, anticoagulation
- Vascular Protection Clinic referral

Assessment/Plan: []

1. CVA:

- Etiology: []
- Deficits: []
- Antiplatelet: []
- Anticoagulation: (if indicated)
- Hypertension: []
- Dyslipidemia: LDL []
- HbA1C: []
- Arrhythmia screening: [indicate if follow-up required]
- Vascular imaging: []
- Driving: [MTO Report Sent – yes/no?]
- Community referrals: []
- SPC/VPC follow-up

References

Peter Langhorne; The Stroke Unit Story: Where Have We Been and Where Are We Going?. *Cerebrovasc Dis* 1 December 2021; 50 (6): 636–643. <https://doi.org/10.1159/000518934>

Lo A, Tahair N, Sharp S, Bayley MT. Clinical utility of the AlphaFIM® instrument in stroke rehabilitation. *Int J Stroke*. 2012 Feb;7(2):118-24. doi: 10.1111/j.1747-4949.2011.00694.x. Epub 2011 Nov 22. PMID: 22103839.

Thank You!