

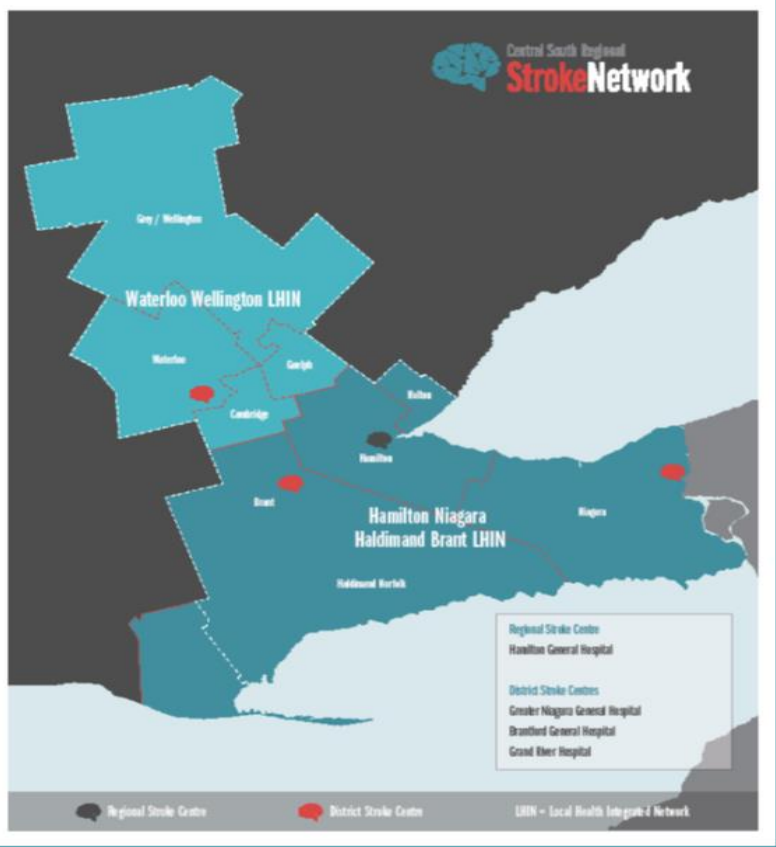
Development of Regional Drip and Ship Protocols at Stroke Thrombolysis Referral Centres to Support Timely Access to Stroke Endovascular Therapy

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Background

Stroke Endovascular Therapy (EVT) is a highly specialized neurointerventional procedure provided at regional tertiary level stroke centres. Within the Central South Regional Stroke Network, over half of the EVT patients treated at the regional EVT centre are referred from the five stroke thrombolysis centres within the region. As a result, it was imperative that the Regional Stroke Endovascular Centre work with the referral thrombolysis centres to ensure timely referral and safe transfer of patients for EVT.



Methods

- Consultation was held with Emergency Medical Service providers within the region to identify the necessary protocols required to support safe transport.
- A literature review and environmental scan of existing Drip and Ship Protocols was completed to identify existing protocols.
- Representatives from the five referring thrombolysis centres were brought together to develop a regional drip and ship order set to support the safe transport of EVT patient who receive IV thrombolysis and those who did not.
- Each centre developed local Drip and Ship Order Sets and other tools to support transfer.

Results

Local Drip and Ship EVT Order Sets were developed that addressed:

- 1) EVT pre-procedural order;
- 2) Vital sign and neurological monitoring;
- 3) Monitoring and management of tPA related complications;
- 4) Management of hypertension, hypotension, and cardiac arrhythmias;
- 5) Management of contrast dye allergic reaction; and
- 6) Other symptom management on route.

Additional resources were developed to support transfer were:

- EVT Educational Resource.
- EVT Patient Transfer Policy.
- EVT Transport Checklists.
- EVT Transport Medication Kits.
- EVT Transfer Documentation.

Order Sets, Tools and Resources

Mechanical Thrombectomy (Clot Retrieval)

Your family member has had a stroke caused by a blockage of blood flow to the brain. This type of stroke is called an ischemic stroke.

Treatments that are being considered:

- A medication called tPA (tissue plasminogen activator). This medication helps to dissolve or break down the clot and restore blood flow to the brain. It is given through an intravenous (IV), a thin tube that is inserted into a vein in the arm. Some patients are not eligible to receive tPA because of medical conditions or medicines taken.
- Thrombectomy (throm-bec-to-mee) – a procedure to remove the blood clot. To determine if your family member is eligible for this procedure, he or she will have special imaging called a CTA (computed tomography angiogram) to look at blood vessels and blood flow in the brain.

Acute Stroke External Transfer Orders for Endovascular Therapy/Mechanical Thrombectomy

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Regional Stroke Centre/ Stroke Endovascular Centre

- Hamilton General Hospital

Regional Stroke Thrombolysis Referral Centres

- Brant Community Healthcare System
- Grand River Hospital
- Guelph General Hospital
- Joseph Brant Hospital
- Niagara Health System:
- Greater Niagara Site

Stroke Endovascular Checklist for Transfer

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Purpose

To describe the process that was undertaken to develop a regional drip and ship protocol to support the safe and timely transfer to the EVT centre.

Conclusion

The collaborative development of regional drip and ship processes has supported the timely and safe transport of regional EVT cases from the referral stroke thrombolysis centres to the regional EVT centre. It has also limited delays to treatment upon arrival to the EVT centre by ensuring the EVT pre-procedure preparation is completed at local centres prior to transport.



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