

Improving Access to Endovascular Thrombectomy (EVT)

State-of-the-Art Stroke Care in Newfoundland and Labrador

Overview

Endovascular Thrombectomy (EVT) is a gold standard in hyperacute ischemic stroke care. This minimally invasive procedure to remove blood clots from blocked arteries in the brain is a recommended Canadian Stroke Best Practice that is accessible in every province in Canada.

Since June 2022, NL Health Services has offered this state-of-the-art stroke care. EVT is completed at the Health Sciences Centre in St. John's.

EVT is a time-dependent intervention used to treat eligible patients with hyperacute ischemic stroke. It is performed by an interventional neuroradiologist and radiology team. Specialized imaging is used to guide a catheter through arteries to remove a blood clot from large brain vessels. This restores blood flow to the brain, helping prevent further damage.

Eligible patients can potentially be treated up to 24 hours since 'last known well' (the date and time at which the patient was last known to be without signs and symptoms of stroke); however, early EVT intervention leads to better outcomes.

In response to Health Accord NL's Call to Action to improve cardiovascular and stroke outcomes and in alignment with its strategic priority to provide access, NL Health Services has identified EVT expansion as an operational objective.



Impacts

EVT can profoundly impact an acute ischemic stroke patient's outcomes such as neurological status, physical and cognitive function, and mortality risk.

EVT not only provides better outcomes for patients but also decreases the health-care costs and personal burden associated with stroke. Research has shown EVT patients have decreased length of stay in acute care, reduced inpatient rehabilitation stay, and reduced need for community rehabilitation resources and supports.



Teamwork

Implementing and sustaining EVT access has been the collaborative effort of many programs and providers across the stroke continuum including, but not limited to, Emergency Medical Services, Emergency Program, Neurology, Radiology, Interventional Radiology, Critical Care, Intensive Care Unit, and Anesthesiology.



Highlights/Targets

HIGHLIGHTS:

- ✓ June 2022 – EVT launched in Eastern Urban Zone.
- ✓ March 2023 – Expanded to Eastern Rural Zone.
- ✓ September 2024 – EVT Service expanded to 24/7, 365 days a year.
- ✓ March 2024 – Expanded to Central Zone.
- ✓ April 2024 – Expanded 'last known well' to 24 hours in all three zones.
- ✓ September 2024 – 72 cases completed.



Activities

- Launching and expanding EVT has been a collaborative effort between multiple programs and zones.



Enablers/success factors:

- Steering committees
- Capacity/readiness review and understanding of next steps; requesting necessary resources
- Order sets/policies/standard operating procedures supporting standardized, evidence-based, hyperacute stroke care
- Integration across programs and engagement of front-line staff
- Multi-program and zonal EVT case debriefs
- Review of EVT cases to highlight successes and identify areas for improvement
- Access to data
- Review of data and tracking performance indicators



I am so happy to thank the staff as they definitely contributed to my fast (day of) immediate recovery and my longer-term recovery which is about 98% of my old normal. Due to your quick action, I am able to function as if nothing happened.

- Patient who received EVT in Newfoundland and Labrador



Next Steps and Opportunities

- Expand to Labrador-Grenfell Zone in October 2024 and Western Zone in December 2024. This will result in full provincial coverage for EVT.
- Standardize acute stroke pathways.
- Review door-in and door-out times, as well as door-to-groin puncture time to meet national benchmarks.
- Continue collaborating with programs and zones to improve stroke care.



ICARE

Innovation
Compassion
Accountability
Respect
Excellence

Provincial Cardiovascular and Stroke Program

NL Health Services