

February 1, 2021

Re: Expanding Coverage of Telestroke up to 24 hours from Stroke Symptom Onset.

Dear Telestroke Referring Hospitals and Provincial Stroke System Stakeholders

The Provincial Hyperacute Stroke Care Steering Committee has recently recommended that Ontario move forward with a 24-hour hyperacute stroke treatment window for selected patients. While the evidence for thrombolysis (Alteplase) for ischemic stroke remains at 4.5 hours from when the patient was last known to be well, the evidence for Endovascular Thrombectomy (EVT) has demonstrated benefit for selected patients in this longer time window. This means that all EVT hospitals will need to provide access to EVT and that Telestroke hospitals should screen for potentially eligible patients and enact an appropriate Telestroke consult to confirm this eligibility.

To support Telestroke hospitals the Telestroke Referral worksheet has been updated with the following key changes:

- Further clarification regarding severe pre-stroke impairments that would exclude patients as candidates
- Reference to screen for clinical evidence of a large vessel occlusion (LVO) stroke as determined by disabling neurological deficits (moderate to severe motor weakness with or without aphasia or hemi-neglect) OR a positive score on the ACT FAST screening tool. The presence of an LVO will be confirmed by the Telestroke Neurologist when the CT Angiogram is reviewed.
- Next steps when the patient meets or does not meet the full selection criteria, including timing of when to call CitiCall Ontario for the Telestroke consult.
- Inclusion of an algorithm demonstrating application of the ACT FAST tool¹ and diagnostic imaging in the expanded time window for assessment.

¹ The ACT FAST Screen has been identified as a useful tool to support screening of potential Large Vessel Occlusion stroke patients and can be integrated into Emergency Department code stroke protocols. Training materials, as developed by the Regional Acute Stroke Best Practice Coordinators are available on the [CorHealth Ontario website](#). Please work in collaboration with your Regional Stroke Network team to implement this tool.

We recommend that referring physicians use this form and algorithm² to determine your patient's eligibility and to note the patient information that will generally be needed prior calling CritiCall Ontario and requesting a Telestroke consultation.

The clinical literature to date references the use of CT Perfusion and automated imaging software to select patients however, not having this technology should not be a barrier to expanding service in this time window. Automated CTP software is a helpful adjunct in selecting patients, particularly for those with longer transfer distances for EVT, but is not mandatory in order to consider access to EVT up to 24 hours of stroke symptom onset (for unwitnessed stroke, based on when the patient was last known to be well). However, multiphase CTA (with delayed imaging) **is required** to confirm the presence and location of the LVO and to assess the patient's collateral circulation.

For Telestroke sites, after reviewing the selection criteria on the referral form, if you are still uncertain about the patient's eligibility, please do not hesitate to call CritiCall Ontario to connect to the Telestroke Neurologist on-call. If your patient is clearly **not** a candidate for IV tPA **or** Endovascular Therapy, then you should contact your local or regional (district or regional stroke centre) neurologist or stroke specialist if you require advice concerning optimal stroke care.

Non designated stroke hospitals (non tpa hospitals) should follow regional stroke protocols for 24 hour EVT access.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Frank L. Silver".

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² The referral form and algorithm will be made available on the Ontario Telehealth Network website [Telestroke Resource Centre](#) and CorHealth Ontario's [EVT Resource Centre](#)



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