



**North Country  
Regional Emergency Medical  
Advisory Committee**

**Policy Statement**

*Serving: St. Lawrence, Jefferson, and Lewis Counties*

No. 17-07

Date: 4/03/2017  
Revised: 2/01/2021

Re: Stroke

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**Purpose**

To provide transport destination guidance for suspected ischemic stroke patients in the North Country Emergency Medical Services region.

**Background**

The 2019 updates to the American Heart Association Guidelines for the Early Management of Patients with Acute Ischemic Stroke state that “treatment of acute ischemic stroke with tPA is of proven benefit for selected patients up to 4.5 hours after symptom onset.” These guidelines also state that “patients with a positive stroke screen or who are strongly suspected to have a stroke should be transported rapidly to the closest healthcare facilities that are able to administer IV alteplase,” “the benefit of bypassing the closest (tPA-capable facility) to bring the patient to one that offers a higher level of stroke care, including mechanical thrombectomy, is uncertain,” and that “benefit of (tPA) therapy is time-dependent, and treatment should be initiated as quickly as possible.” Consideration for mechanical thrombectomy is also not a contraindication to the administration of tPA if the patient is otherwise eligible. However, AHA does recommend that “procedures to identify patients who are ineligible for IV thrombolysis and have a strong probability of large vessel occlusion (LVO) stroke should be developed to facilitate rapid transport of patient potentially eligible for thrombectomy to the closest healthcare facilities that are able to perform mechanical thrombectomy.” Additionally, these guidelines allow for mechanical thrombectomy in selected patients up to 24 hours since last known well or time of symptom onset.

The 2019 NYS EMS Collaborative Protocol states that unless otherwise regionally designated, suspected ischemic stroke patients will be transported to a NYS DOH Designated Stroke Center if last known well time to arrival in ED will be less than 3.5 hours. Per current information from the NYS DOH website, the only NYS DOH Designated Stroke Center within the NCEMS Region is Samaritan Medical Center, a primary stroke center. Additional tPA-capable hospitals within the NCEMS Region include Lewis County General Hospital, Carthage Area Hospital, River Hospital, Claxton-Hepburn Medical Center, Gouverneur Hospital, Massena Memorial Hospital, Clifton-Fine Hospital, and Canton-Potsdam Hospital. Comprehensive stroke centers capable of mechanical thrombectomy that are outside of the NCEMS region but within reasonable transport distance include Upstate Medical University and Crouse Hospital in Syracuse, The University of Vermont Medical Center in Burlington, VT, Rochester Medical Center in Rochester, and Albany Medical Center in Albany.

In the NCEMS region, strict adherence to NYS EMS Collaborative Protocol could result in a thrombolysis-eligible patient bypassing a local tPA-capable facility for the nearest NYS DOH

Designated Stroke Center. For these patients, this transport delay risks exceeding the established time window for tPA administration.

The FAST-ED score is a validated and generally accepted tool to help determine the likelihood of large vessel occlusion (LVO). Typically, a score of 4 or greater is considered to be consistent with a strong possibility of LVO. This score has been in use in the NCEMS region with a training program implemented.

## **Policy**

North Country EMS providers will transport all suspected ischemic stroke patients who are within 3.5 hours of symptom onset or last known well time to the closest tPA-capable facility. NCEMS providers should consider transport directly to a comprehensive stroke center for suspected ischemic stroke patients who are outside the 3.5-hour timeframe and have a FAST-ED score of 4 or greater. NCEMS providers may consider transport directly to a comprehensive stroke center for suspected ischemic stroke patients who are outside of the 3.5-hour timeframe with a FAST-ED score of 3 or less. Deviation from this policy may be authorized by online medical control.