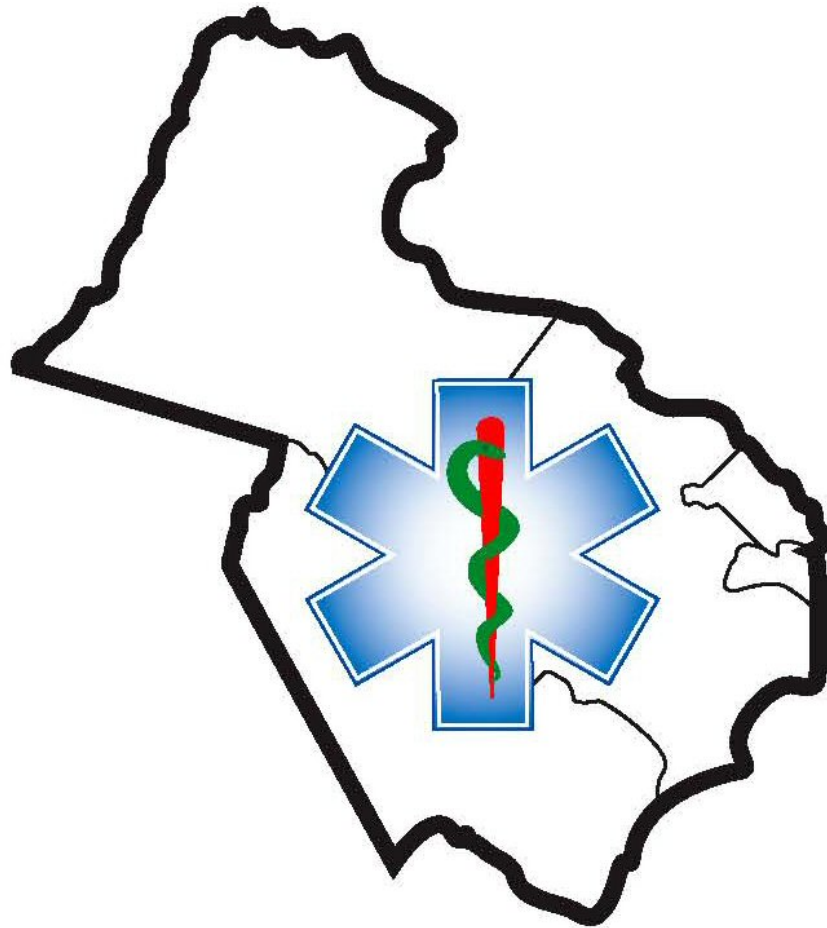


**Northern Virginia
Prehospital and Inter-facility
Regional Stroke Triage Plan**



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Table of Contents

Executive Summary	1
Field Stroke Triage Decision Scheme	3
Guidance Documents	4
Rapid Arterial Occlusion Evaluation (RACE) Scale.....	5
VAN Stroke Assessment (vision, aphasia, neglect)	6
Regional Stroke Protocol Guidelines	7
Acute Stroke Patient Transport Considerations	8
Certified Stroke Centers.....	9
Northern Virginia National Capital Region Stroke Certified Facilities	12
Inter-facility Triage Criteria.....	13
Stroke Triage Quality Monitoring	13
Stroke-Related Resources	14
Northern Virginia Region	15
Code of Virginia References	17

Attached Documents

Post-IV Tissue Plasminogen Activator (tPA) Inter-facility Transfer

tPA Dosing and Administration Communication Form

Executive Summary

Under the [Code of Virginia § 32.1-111.3](#), The Office of Emergency Medical Services acting on behalf of the Virginia Department of Health has been charged with the responsibility of maintaining a Statewide Stroke Triage Plan. The Northern Virginia EMS Council is responsible for establishing a strategy through a formal regional stroke triage plan that incorporates the region's geographic variations and acute stroke care capabilities and resources, including hospitals that are Certified Stroke Centers. This includes Acute Stroke Ready, Primary and Comprehensive facilities that have gained certification by the Joint Commission or a comparable process consistent with the recommendations of the Brain Attack Coalition. The Regional Stroke Triage Plan is to include guidelines for prehospital patient care as well as inter-hospital patient transfers.

Purpose: The purpose of the Northern Virginia Regional Stroke Triage Plan (hereinafter known as the Regional Plan) is to establish a uniform set of criteria for the prehospital and inter-hospital triage and transport of acute stroke patients. The Regional Plan will augment the state stroke triage plan to recognize and address variations with the regional EMS and hospital resources. The Regional Plan addresses patients experiencing an "acute stroke," defined as "any patient suspected of having an acute cerebral ischemic event or stroke with the onset of any one symptom since their documented last known well time.

Focus: The primary focus of the Regional Plan is to provide guidelines to facilitate the early recognition of patients suffering from acute stroke and to expedite their transport to a Certified Stroke Center able to provide definitive care within an appropriate time window.

If agency protocols do not provide direction, on-line medical control should be used to discuss cases outside the appropriate window due to the continuing evolution of scientific evidence indicating successful management of acute stroke greater than the historical four and one-half hour time window. Patients may be candidates for interventional treatments up to 24 hours or more from the onset of symptoms in certain cases. It may be determined that expeditious transfer or transport directly to a Comprehensive Stroke Center may be beneficial for a specific patient.

Regardless of the time of onset the sooner an acute stroke is treated, the better the potential outcome ("Time is Brain"). In some cases, patients may benefit from intervention *up to 24 hours* following symptom onset. Incorporating patient's time of onset and constellation of symptoms, the mode of transport and destination may be altered based on collaboration with on-line medical control or jurisdictional OMD protocols.

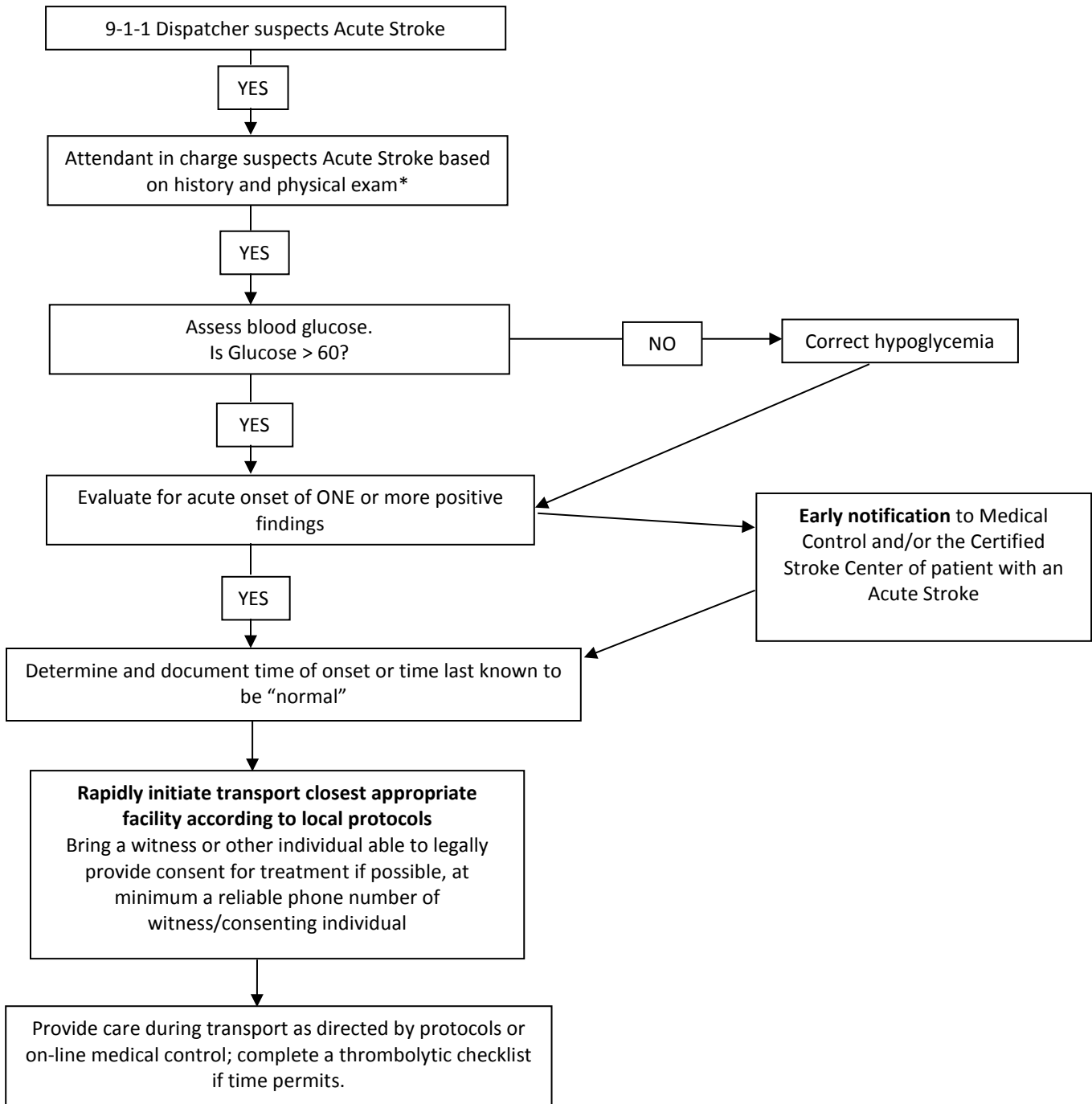
Goal: The primary goal of the Regional Plan is: **To develop a Stroke Emergency Care System that, when implemented, will result in decreased stroke mortality and morbidity in the Northern Virginia Region.**

In order to accomplish this, a number of specific processes are essential. These are:

1. The ability to rapidly and accurately identify patients suffering from a stroke-like presentation.
2. Patients who have sustained an acute stroke event should preferably be transported to a Stroke Center, capable of providing immediate and comprehensive assessment, resuscitation, intervention, and definitive care.

3. The Northern Virginia EMS Council will provide continuous and effective region-wide coordination of prehospital and hospital care resources so stroke patients will be most expeditiously transported to definitive stroke care. To accomplish this process there must be a method of tracking the care capability for stroke patients in both the prehospital realm and in-hospital realm while reviewing the quality of the process itself.
4. Provide quality EMS service and patient care to the citizens of each EMS System.
5. Continuously evaluate the EMS System based on established EMS performance measures for stroke. This is encouraged through both in-house performance evaluation and participation with the Northern Virginia EMS Council's Performance Improvement Committee. Hospital Stroke Centers' reports have been added to the agenda for this committee.

Field Stroke Triage Decision Scheme



(*) Modified from Virginia State Stroke Triage Protocols

Guidance Documents

Prehospital Stroke Scales

- All patients suspected of having an acute stroke should undergo a formal screening algorithm such as CPSS, LAPSS, LAMS, RACE, or VAN.
- Use of stroke algorithms has been shown to improve identification of acute strokes by EMS providers, and the LAMS, RACE, and VAN scales outlined below have been shown to have a positive predictive value in identifying a large vessel occlusion in the field.
- The results of any stroke scale should be noted on the prehospital medical record.



- EMS providers are encouraged to use an app such as STROKE EMS, developed by the Get Ahead of Stroke Campaign to assess stroke patients easily and efficiently in the field without memorizing the scales or instructions for each assessment step. STROKE EMS includes the LAMS, RACE, C-STAT, FAST-ED, and the VAN stroke scales.

Cincinnati Prehospital Stroke Scale (CPSS)

-if one parameter is abnormal, the stroke is considered positive

	Normal	Abnormal
Facial Droop	Both sides of face move equally	One side of face does not move at all
Arm Drift	Both arms move equally or not at all	One arm drifts compared to the other
Speech	Patient uses correct words with no slurring	Slurred or inappropriate words or mute

A 2013 retrospective analysis by Je Sung You, et al, correlates a CPSS score of 2 to show 96.2% sensitivity and 62.1% specificity for the actual administration of IV-tPA within 3 hours of stroke onset.

Los Angeles Prehospital Stroke Scale

	Yes	Unknown	No
Age ≥45			
No history of seizures			
Symptoms ≤24 hours			
Ambulatory at baseline			
Glucose 60-400			

If the answer to any of the above is no, the Los Angeles Motor Screening Scale does not apply

Los Angeles Motor Screening Scale

	0	1	2
Facial Droop	Absent	Present	
Arm Drift	Absent	Drifts down	Falls rapidly
Grip Strength	Normal	Weak	No grip

A score of 3 or greater is considered strong potential for a large vessel occlusion (LVO)

Rapid Arterial Occlusion Evaluation (RACE) Scale

Rapid Arterial Occlusion Evaluation (RACE) Scale An EMS Assessment Tool for Acute Ischemic Stroke

(Sensitivity 85%, Specificity 68%)

Test Item	Score = 0	Score = 1	Score = 2	Patient Score
Facial Palsy	Absent	Mild	Moderate/Severe	
Arm Motor	Normal/Mild	Moderate	Severe	
Leg Motor	Normal/Mild	Moderate	Severe	
Head/Gaze Deviation	Absent	Present	N/A	
Aphasia* (if righthemiparesis)	Performs Both Tasks	Performs 1 Task	Performs Neither Tasks	
Agnosia* (if lefthemiparesis)	Patient Recognizes Arm and Impairment	Unable to Recognize Arm or Impairment	Unable to Recognize BOTH Arm and Impairment	
			TOTAL SCORE = (0-9)	

*Aphasia: Ask the patient to: 1. "Close your Eyes" AND 2. "Make a Fist"

*Agnosia: Ask the patient and evaluate recognition of deficit:

1. While showing paretic arm: "Whose arm is this?"
2. Ask patient: "Can you lift both arms and clap?"

If RACE Score = 5 or greater, patient may have an ischemic stroke with a large vessel occlusion

Reference:
Natalia Pérez de la Ossa, et al. (2014). Design and Validation of a Prehospital Stroke Scale to Predict Large Arterial Occlusion Evaluation Scale. *Stroke*, 45, 87-91. Retrieved from <http://stroke.ahajournals.org/content/45/1/87.full>

VAN Stroke Assessment (vision, aphasia, neglect)

Vision, aphasia, neglect emergent large vessel occlusion screening tool

Stroke VAN

- How weak is the patient?
Raise both arms up
- Mild (minor drift)
 - Moderate (severe drift—touches or nearly touches ground)
 - Severe (flaccid or no antigravity)
 - Patient shows no weakness. Patient is VAN negative

(exceptions are confused or comatose patients with dizziness, focal findings, or no reason for their altered mental status then basilar artery thrombus must be considered; CTA is warranted)

- Visual disturbance
- Field cut (which side) (4 quadrants)
 - Double vision (ask patient to look to right then left; evaluate for uneven eyes)
 - Blind new onset
 - None

- Aphasia
- Expressive (inability to speak or paraphasic errors); do not count slurring of words (repeat and name 2 objects)
 - Receptive (not understanding or following commands) (close eyes, make fist)
 - Mixed
 - None

- Neglect
- Forced gaze or inability to track to one side
 - Unable to feel both sides at the same time, or unable to identify own arm
 - Ignoring one side
 - None

Patient must have weakness plus one or all of the V, A, or N to be VAN positive. VAN positive patients had 100% sensitivity, 90% specificity, positive predictive value 74%, and negative predictive value 100% for detecting large vessel occlusion. CTA, CT angiography; VAN, vision, aphasia, and neglect.

Regional Stroke Protocol Guidelines

- * All patients should receive a general patient assessment.
- * Patients with signs and symptoms of **acute stroke syndrome** should be assessed to identify and define the following:
 - Last known well
 - Signs/symptoms
 - Glucose level checked
 - SAMPLE history to include:
 - Mention of acute stroke mimics (i.e. seizures, migraines, hypo/hyperglycemia and others as deemed appropriate)
 - Medications check with an emphasis on whether the patient is taking blood thinners and bring in actual medication bottles if able
 - Co-morbid conditions impacting short and long-term management
 - Identify and address causes of secondary insult – hypoxia, hypotension, hypoglycemia, trauma, coagulopathy, etc.
- * Utilize a defined stroke screening tool
- * Provide appropriate treatment for hypoglycemia, IV access (preferably 18ga), and cardiac monitoring if available, reassessment of neurologic exam and stroke scale
- * Contact medical control and/or the receiving hospital as soon as possible to advise them that you are transporting a potential acute stroke patient.
- * Transport stable acute stroke patients to Certified Stroke Centers if last known well time is up to 24 hours of EMS assessment. If symptoms are acute, but over 24 hours, on-line medical control should be freely used to discuss the individual patient case to determine whether transport directly to a Certified Stroke Center would be of benefit in that specific patient.
- * **Adhere to jurisdiction-specific protocols which should incorporate specific strategies appropriate** to their area to assure that acute stroke patients evaluated more than 24 hours from last known well time can still potentially access specialty resources for acute stroke intervention and management. Examples may include partnerships with acute stroke specialists at the Comprehensive Stroke Center who can provide input on specific patient cases in a timely manner to either the on-line medical control physician or EMS provider/unit directly.
- * Transport unstable patients to the closest appropriate medical facility.
- * Every effort should be made to minimize on-scene times including initiate BLS transport and arrange rendezvous with ALS en route if needed

Acute Stroke Patient Transport Considerations

MODE OF TRANSPORTATION: The Northern Virginia region is unique in its availability of EMS and acute stroke care resources. Consideration should be given to hospitals available to the region and the resources they have available to treat acute stroke patients.

Stroke patients who meet the criteria indicative of an acute stroke shall be preferentially transported to a Certified Stroke Center.

Transport of acute stroke patients, as defined in this plan, by helicopter EMS (HEMS) should:

1. Significantly lessen the time from scene to a Certified Stroke Center compared to ground transport
2. Be utilized to achieve the goal of having acute stroke patients expeditiously transported to a Certified Stroke Center, within the appropriate window of symptom onset as identified by the most current stroke treatment guidelines; unless consultation with on-line medical control has occurred.

NOTE: Any patient with a compromised airway or impending circulatory collapse must be transported to the closest hospital Emergency Department. Also, we recognize the significance of patients who may be experiencing a Transient Ischemic Attack (TIA) and encourage EMS agencies to develop appropriate transport policies for these patients.

RAPID TRANSPORTATION: Because stroke is a time-critical event, time is of the essence, and EMS providers should initiate **rapid transport** to the nearest appropriate stroke facility if acute stroke is suspected. Consideration should also be given to prehospital resources, including use of HEMS, available at the time of the incident, and other conditions such as transport time, road and weather conditions. Use of HEMS can facilitate acute stroke patients reaching Certified Stroke Centers in a timeframe that allows for acute treatment interventions.

The likelihood of benefit of acute stroke therapy decreases with time, but there are several therapy options which offer definite benefit outside the standard 24-hour window; refer to local protocols.

NOTE: The use of the term “rapid transport” is a reminder to reduce time on scene to minimize out of hospital time and does not relieve the operator of the vehicle from exercising due regard.

Designated Stroke Centers

The Commonwealth of Virginia defines a “Designated Stroke Center” as a hospital that has achieved Primary Stroke Center Certification by the Joint Commission or a comparable certification process consistent with the recommendations of the Brain Attack Coalition. The process of stroke designation/certification is entirely voluntary on the part of the hospitals and identifies hospitals that have established and maintain an acute stroke program that provides a specific level of medical, technical, and procedural expertise for acute stroke patients.

Designation ensures that the hospital is prepared to provide definitive acute stroke care at all times and has an organized approach to providing clinical care, performance improvement and education. The list of stroke centers is growing. To that end, a list of The Joint Commission Primary Stroke Centers that meet the definition of Virginia Designated Stroke Centers is available at <http://virginiastrokesystems.org/> or by entering the state of interest at <http://www.qualitycheck.org/consumer/searchQCR.aspx>. A searchable list of DNV Certified Stroke Centers is available at: <http://dnvglhealthcare.com/hospitals>

Designated Stroke Centers accessible from within the Northern Virginia region via ground or HEMS with minimal delay can be found in this plan on page 12.

Joint Commission offers four advanced levels of stroke certification: Acute Stroke Ready Hospital (ASRH), Primary Stroke Center (PSC), Thrombectomy-Capable Stroke Center (TSC), and Comprehensive Stroke Center (CSC). The following is a comparison of program requirements.

Program Concept	ASRH	PSC	TSC	CSC
Eligibility	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care.	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care.	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care. Organization must have performed mechanical thrombectomy and post-procedure care for at least 15 patients with ischemic stroke over the past 12 months (or 30 over past 24 months). Neurointerventionists who routinely take call to perform mechanical thrombectomy must: -Be CAST certified; OR -Completed ACGME/equivalent residency in neurosurgery/neurology/radiology; -Completed ACGME/CAST/UCNS/equivalent stroke/neurocritical care/neuroradiology fellowship; -Completed neuroendovascular training (CAST accredited or similarly rigorous program); -Performed 15 mechanical thrombectomies over the past 12 months (or 30 over past 24 months) (procedures performed at hospitals other than the one applying for TSC certification can be included)	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care. Treatment of 20 SAH caused by aneurysm annually (40 over 2 years) Capable of treating aneurysms by performing 15 endovascular coiling or microsurgical clipping procedures annually (30 over 2 years) Administering IV thrombolytic therapy 25 times annually (50 times over 2 years) **CSCs will be required to meet a minimum mechanical thrombectomy volume for eligibility in the future**
Program Medical Director	Sufficient knowledge of cerebrovascular disease	Sufficient knowledge of cerebrovascular disease	Neurology background with ability to provide clinical and administrative guidance to program	Has extensive expertise; available 24/7
Acute Stroke Team	Available 24/7, at bedside within 15 minutes	Available 24/7, at bedside within 15 minutes	Available 24/7, at bedside within 15 minutes	Available 24/7, at bedside within 15 minutes
Emergency Medical Services Collaboration	Access to protocols used by EMS	Access to protocols used by EMS	Access to protocols used by EMS, routing plans; records from transfer	Access to protocols used by EMS, routing plans; records from transfer
Initial Assessment of Patient	Emergency Department physician, nurse practitioner, or physician assistant	Emergency Department physician	Emergency Department physician	Emergency Department physician
Diagnostic Testing Capability	CT, labs 24/7 (MRI 24/7 if used)	CT, MRI (if used), labs 24/7; CTA and MRA (to guide treatment decisions), at least one modality for cardiac imaging when necessary	CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE as indicated	CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE, TTE as indicated
Neurologist Accessibility	24/7 via in person or telemedicine	24/7 via in person or telemedicine	24/7 via in person or telemedicine; written call schedule for attending physicians providing availability 24/7	Meets concurrently emergent needs of multiple complex stroke patients; Written call schedule for attending physicians providing availability 24/7

Neurosurgical Services	Within 3 hours (provided through transferring the patient)	Within 2 hours; OR is available 24/7 in PSCs providing neurosurgical services	Within 2 hours; OR is available 24/7 in TSCs providing neurosurgical services	24/7 availability: Neurointerventionist; Neuroradiologist; Neurologist; Neurosurgeon
Telemedicine	Within 20 minutes of it being necessary	Available if necessary	Available if necessary	Available if necessary
Treatment Capabilities	IV thrombolytics; Anticipate transfer of patients who have received IV thrombolytics	IV thrombolytics and medical management of stroke	IV thrombolytics; Mechanical thrombectomy, IA thrombolytics	IV thrombolytics; Endovascular therapy; Microsurgical neurovascular clipping of aneurysms; Neuroendovascular coiling of aneurysms; Stenting of extracranial carotid arteries; Carotid endarterectomy
Transfer protocols	With one PSC or CSC	For neurosurgical emergencies	For neurosurgical emergencies	For receiving transfers and circumstances for not accepting transferred patients
Staff Stroke Education Requirements	ED staff – a minimum of twice a year; core stroke team at least 4 hours annually	ED staff – a minimum of twice a year; core stroke team at least 8 hours annually	Nurses and other ED staff – 2 hours annually; Stroke nurses and core stroke team – 8 hours annually	Nurses and other ED staff - 2 hours annually; Stroke nurses and core stroke team - 8 hours annually
Provision of Educational Opportunities	Provides educational opportunities to prehospital personnel	Provides educational opportunities to prehospital personnel; Provides at least 2 stroke education activities per year to public	Provides educational opportunities to prehospital personnel; Provides at least 2 stroke education activities per year to public	Sponsors at least 2 public educational opportunities annually; LIPs and staff present 2 or more educational courses annually for internal staff or individuals external to the comprehensive stroke center (e.g., referring hospitals)
Clinical Performance Measures	Standardized Measures: 3 inpatient and 2 outpatient stroke measures	Standardized Measures: 8 core stroke measures	Standardized Measures: 8 PSC stroke measures as well as 5 ischemic hemorrhagic CSTK measures for a total of 13.	Standardized Measures: 8 core stroke measures and 10 comprehensive stroke measures for a total of 18
Research	N/A	N/A	N/A	Participates in patient-centered research that is approved by the IRB
Guidelines	Recommendations from Brain Attack Coalition for Acute Stroke Ready Hospitals, 2013	Recommendations from Brain Attack Coalition for Primary Stroke Centers, 2011	AHA/ASA Focused Update for the Early Management of Patients with Acute Ischemic Stroke Regarding Endovascular Treatment, 2015	Recommendations from Brain Attack Coalition for Comprehensive Stroke Centers, 2005
Review	One Reviewer, One Day	One Reviewer, One Day	One Reviewer, Two Days	Two Reviewers, Two Days

The above grid is only a comparison of program requirements and should not be relied upon in lieu of reading a program manual. © Copyright 2018 The Joint Commission. The Stroke Certification Programs – Program Concept Comparison is used by American Heart Association/American Stroke Association with permission. Current as of 01/05/18

Note: A current list of The Joint Commission Acute Stroke Ready/Primary/Comprehensive Stroke Centers that meet the definition of Virginia Certified Stroke Centers by entering the state of interest at <http://www.qualitycheck.org/consumer/searchQCR.aspx>

Northern Virginia National Capital Region Stroke Certified Facilities

Facility Name	Location	Designation	24/7 Thrombectomy Capable
Inova Alexandria Hospital	Alexandria	Primary	YES
Inova HealthPlex — Ashburn	Ashburn	Acute Stroke Ready	
Inova Fairfax Hospital	Falls Church	Primary	YES
Inova Fair Oaks Hospital	Fairfax	Primary	
Inova Loudoun Hospital	Leesburg	Primary	
Inova Loudoun — Cornwall Medical Campus	Leesburg	Acute Stroke Ready	
Inova Mt. Vernon Hospital	Alexandria	Primary	
Mary Washington Hospital	Fredericksburg	Primary	
Reston Hospital Center	Reston	Primary	
Stone Springs Hospital	Dulles	Primary	
Sentara Northern Virginia Medical Center	Woodbridge	Primary	
Virginia Hospital Center	Arlington	Primary	YES
George Washington University Hospital	Washington, DC	Comprehensive	
Georgetown Hospital	Washington, DC	Comprehensive	
Washington Hospital Center	Washington, DC	Comprehensive	

Inter-facility Triage Criteria

It is recommended that hospitals, including non-certified stroke centers, have transfer guidelines and agreements in place for the expeditious and appropriate management of acute strokes when the care required exceeds their capabilities. This is especially critical for transfer of patients following thrombolysis.

The enclosed t-PA transfer sheet is an example of a tool that could be used to monitor t-PA en route. This is jurisdictionally dependent and we encourage discussions between jurisdictions and their receiving hospitals to reach an agreement as to how situations where a private company is unavailable to transfer an urgent stroke patient receiving t-PA.

Stroke Triage Quality Monitoring

It is strongly suggested that each jurisdiction form a relationship with their primary receiving facility involving the exchange of information with the intent of quality improvement and identification of potential delays in the timely care of patients with acute strokes.

The Northern Virginia EMS Council's Performance Improvement Committee will report aggregate acute stroke triage findings biannually. A de-identified version of the report will be available and will include, minimally, as defined in the statewide plan, the frequency of:

Agency Specific Performance Measures	Hospital-Specific Performance Measures
Number of field activations of Code Strokes	Number of times tPA given
Percentage of instances where 100% of blood glucose levels checked and stroke scale performed	Average time between documented arrival and registration time
Percentage of time last known normal is documented	Average door to needle time
Percentage of time glucose is checked and documented	Number of transfers to Comprehensive Stroke Centers
Average FMC to transport initiated	Average door to groin times (for interventional candidates)
Average FMC to arrival at destination	Number of acute interventional stroke cases

The program reports shall be used as a guide and resource.

Stroke-Related Resources

Virginia Stroke Systems Task Force Web page: <http://www.vdh.virginia.gov/stroke/virginia-stroke-systems-task-force/>

Virginia Office of EMS Stroke Web page: <http://www.vdh.virginia.gov/emergency-medical-services/trauma-critical-care/virginia-stroke-system/>

Joint Commission:

https://www.jointcommission.org/facts_about_joint_commission_stroke_certification/

[VDH Heart Disease and Stroke Prevention Project](#)

[Target Stroke – Resources and Best Practices](#)

[American Stroke Association](#) (AHA/ASA)

[National Institute of Neurological Disorders & Stroke \(NINDS\)](#)

[NIH/NINDS Know Stroke Website](#)

Northern Virginia Region

EMS system coordination is central to the development and implementation of an efficient and effective regional emergency medical services delivery system. EMS regions are designated by the Virginia Board of Health. The Code of Virginia, §32.1-111.11, charges regional EMS councils with the development and implementation of an efficient and effective regional emergency medical services delivery system. The Northern Virginia Emergency Medical Services Council (the Council) provides coordination and oversight to a very large and complex EMS system. Since 1980, the Council has coordinated working relationships with local fire/EMS agencies, hospitals, physicians, nurses, healthcare facilities, police, medevac agencies, training institutions, emergency planners, health departments, military installations, federal agencies, and fixed-wing agencies.

The Northern Virginia region includes the counties of Arlington, Fairfax, Loudoun, and Prince William; the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park; and the Metro Washington Airports Authority (Reagan National and Washington Dulles International Airports).

The Northern Virginia region has a population of over 2.6 million, two major airports, two large municipal airports, the Pentagon and other Federal and state agencies, numerous corporate headquarters, and endless highways and commuter routes. One out of three Virginians live in the Northern Virginia region.

In this region there are:

- Over 50 EMS agencies (government, volunteer, federal, non-profit, commercial, and industrial)
- 237,000 EMS calls per year
- More than 4,700 EMS providers
- 500 licensed EMS vehicles
- 5 medevac helicopter agencies serving our region
- One fixed wing agency
- 12 hospitals and one psychiatric institution
- 7 freestanding ED's

Hospital Catchment Area:

- HCA Reston Hospital
- INOVA Alexandria Hospital
- INOVA Emergency Care Centers
 - Fairfax
 - Springfield Healthplex
 - Lorton Healthplex
- INOVA Fair Oaks Hospital
- INOVA Fairfax Hospital
 - INOVA Fairfax Hospital for Children
 - INOVA Heart & Vascular Institute
 - INOVA Women's Hospital
- INOVA Loudoun Hospital
 - Lansdowne Campus
 - Cornwall Campus (freestanding ED)

- Ashburn Campus (freestanding ED)
- INOVA Mount Vernon Hospital
- Sentara Northern Virginia Medical Center
 - Lake Ridge (freestanding ED)
- HCA Stone Springs Hospital Center
 - Reston IECC
- Novant Health UVA Health System Prince William Medical Center
- Novant Health UVA Health System Haymarket Medical Center
- Virginia Hospital Center Arlington
- Some patients are transported to Washington, DC hospitals

Helicopter Agencies:

- Fairfax County Police Helicopter Division
- MedSTAR Transport
- PHI Air Medical – Virginia
- STAT MedEvac
- U.S. Park Police

For a more comprehensive listing of the region's resources, see the [Northern Virginia EMS Resource Directory](http://www.northern.vaems.org/) on the Council's website: <http://www.northern.vaems.org/>

Code of Virginia References

Code of Virginia

§ 32.1-111.3. Statewide Emergency Medical Care System

- C. The Board of Health shall also develop and maintain as a component of the Emergency Medical Services Plan a statewide prehospital and inter-hospital Stroke Triage Plan designed to promote rapid access for stroke patients to appropriate, organized stroke care through the publication and regular updating of information on resources for stroke care and generally accepted criteria for stroke triage and appropriate transfer. The Stroke Triage Plan shall include:
1. A strategy for maintaining the statewide Stroke Triage Plan through formal regional stroke triage plans that incorporate each region's geographic variations and stroke care capabilities and resources, including hospitals Certified as "primary stroke centers" through certification by the Joint Commission or a comparable process consistent with the recommendations of the Brain Attack Coalition. The regional stroke triage plans shall be reviewed triennially.
 2. A uniform set of proposed criteria for prehospital and inter-hospital triage and transport of stroke patients developed by the Emergency Medical Services Advisory Board, in consultation with the American Stroke Association, the Virginia College of Emergency Physicians, the Virginia Hospital and Healthcare Association, and prehospital care providers. The Board of Health may revise such criteria from time to time to incorporate accepted changes in medical practice or to respond to needs indicated by analyses of data on patient outcomes. Such criteria shall be used as a guide and resource for health care providers and are not intended to establish, in and of themselves, standards of care or to abrogate the requirements of § [8.01-581.20](#). A decision by a health care provider to deviate from the criteria shall not constitute negligence per se.

§ 32.1-116.1:1. Disclosure of medical records.

Any licensed physician, licensed health care provider, or licensed health care facility may disclose to an emergency medical services provider, emergency medical services physician, or their licensed parent agency the medical records of a sick or injured person to whom such emergency medical services provider or emergency medical services physician is providing or has rendered emergency medical care for the purpose of promoting the medical education of the specific person who provided such care or for quality improvement initiatives of their agency or of the EMS system as a whole. Any emergency medical services provider or emergency medical services physician to whom such confidential records are disclosed shall not further disclose such information to any persons not entitled to receive that information in accordance with the provisions of this section.

§ 32.1-116.2. Confidential nature of information supplied; publication; liability protections.

- A. The Commissioner and all other persons to whom data is submitted shall keep patient information confidential. Mechanisms for protecting patient data shall be developed and continually evaluated to ascertain their effectiveness. No publication of information, research or medical data shall be made which identifies the patients by names or addresses. However, the Commissioner or his designees may utilize institutional data in order to improve the quality of, and appropriate access to, emergency medical services.
- B. No individual, licensed emergency medical services agency, hospital, Regional Emergency Medical Services Council or organization advising the Commissioner shall be liable for any civil damages resulting from any act or omission performed as required by this article unless such act or omission was the result of gross negligence or willful misconduct.

§ 8.01-581.19 Civil Immunity for physicians, psychologists, podiatrists, optometrists, veterinarians, nursing home administrators and Certified emergency services personnel while members of certain committees.

- A. Any physician, chiropractor, psychologist, podiatrist, veterinarian, or optometrist licensed to practice in the Commonwealth shall be immune from civil liability for any communication, finding, opinion, or conclusion made in performance of his duties while serving as a member of any committee, board, group, commission, or other entity that is responsible for resolving questions concerning the admission of any physician, psychologist, podiatrist, veterinarian, or optometrist to, or the taking of disciplinary action against any member of, any medical society, academy, or association affiliated with the American Medical Association, the Virginia Academy of Clinical Psychologists, the American Psychological Association, the Virginia Applied Psychology Academy, the Virginia Academy of School Psychologists, the American Podiatric Medical Association, the American Veterinary Medical Association, the International Chiropractic Association, the American Chiropractic Association, the Virginia Chiropractic Association, or the American Optometric Association, provided that such communication, finding, opinion or conclusion is not made in bad faith or with malicious intent.
- B. Any nursing home administrator licensed under the laws of the Commonwealth shall be immune from civil liability for any communication, finding, opinion, decision, or conclusion made in performance of his duties while serving as a member of any committee, board, group, commission, or other entity that is responsible for resolving questions concerning the admission of any health care facility to, or the taking of disciplinary action against any member of, the Virginia Health Care Association, provided that such communication, finding, opinion, decision, or conclusion is not made in bad faith or with malicious intent.
- C. Any emergency medical services provider who holds a valid certificate issued by the Commissioner of Health shall be immune from civil liability for any communication, finding, opinion, decision, or conclusion made in performance of his duties while serving as a member of any regional council, committee, board, group, commission, or other entity that is responsible for resolving questions concerning the quality of care, including triage, inter-facility transfer, and other components of emergency medical services care, unless such communication, finding, opinion, decision, or conclusion is made in bad faith or with malicious intent.