Acute Stroke Ready Hospital Designation Criteria

ESSENTIAL

STROKE PROGRAM/SYSTEM

- Acute Stroke Team
- EMS communication (two-way communication with EMS)
- Stroke Activation Log

HOSPITAL PERSONNEL

- Acute Stroke Team lead on call who can reach the bedside in 15 minutes (or telehealth provider utilized to not delay stroke treatment)[1]
- Designated Medical Director with experience in stroke care
- Stroke Coordinator of stroke program

STROKE POLICY/GUIDELINES

- Stroke activation plan
- Consult with a Primary or Comprehensive Stroke Center via phone or telehealth
- Posted on call schedule for Acute Stroke Team Lead 24/7
- Treatment guidelines and standardized order sets for acute diagnosis, stabilization, monitoring and treatment of patients for ischemic and hemorrhagic strokes
- Treatment guidelines reviewed and revised annually
- All patients exhibiting stroke symptoms are NPO OR are screened for dysphagia prior to receiving any oral intake of medication, fluids, or food
- Inclusion/exclusion criteria, risks/benefits/alternatives to IV thrombolytic documented in the patient record by provider consistently

CONTINUING EDUCATION

- Acute Stroke Team (including ED and/or Rapid Response providers) have 2 hours of stroke education annually (not including recertification of NIHSS)
- All AST members performing National Institute of Health Stroke Scale (NIHSS) must be NIHSS certified

LABORATORY

- Available 24/7
- Basic blood tests
- Coagulation studies

DIAGONOSTIC IMAGING

- Diagnostic radiology availability 24/7
- Brain imaging with non-contrast CT
- 12 lead ECG (not to delay stroke treatment)

MEDICATIONS

- IV thrombolytic available 24/7 (Alteplase, Tenecteplase)[3]
- First line antihypertensive medications available 24/7

PERFORMANCE IMPROVEMENT PROGRAM

- Participation in North Dakota State Stroke Registry
- Performance Improvement Program
    - Must include, but is not limited to, tracking the following metrics:
        - Pre-notification by EMS
        - Documentation of LKW
        - Initial NIHSS reported
        - Door to CT initiation <25 min
        - Door to CT Interpretation <45 minutes
        - Dysphagia Screen
        - IV alteplase arrive in 2 treat in 3
        - IV alteplase arrive in 3.5 treat in 4.5
        - Door to Needle <60 min
        - Door to Transfer to another hospital time reported (median time)
- Review of hospital and pre-hospital stroke care

TRANSFER AGREEMENTS

- Transfer protocols and agreement for stroke patients from an ASRH and ≥1 hospital to a higher level of care hospital including neurosurgical coverage and endovascular treatment on a 24/7 basis
- Local emergency medical services transport plans reviewed annually

RECOMMENDED

- Helicopter landing sites
- Competency check/mock stroke code on NIHSS and IV thrombolytic administration annually with staff
- Door-in to door-out time of <90 minutes when transferring to a higher-level stroke center for time-critical therapy
- Blood typing
- Comprehensive blood bank or access to blood bank

Reference: [1] Telestroke evaluations of AIS patients can be effective for correct IV alteplase eligibility decision making *(COR I; LOE B-R)* [2]If a patient or representative not available for consent, justifiable to proceed without consent in an otherwise eligible patient. [3]IV Alteplase (0.9mg/kg, maximum dose 90mg over 60 minutes with initial 10% of dose given as bolus over 1 minute) is recommended for selected patients who can be treated within 3 and 4.5 hour of ischemic stroke symptom onset or patient last known well *(COR I; LOE B-R)* It may be reasonable to choose tenecteplace single IV bolus of 0.25mg/kg, maximum 25mg over IV alteplase in patients without contraindications for IV fibrinolytics who are also eligible to undergo mechanical thrombectomy *(COR IIa; LOE B-R)*.