



Suspected Stroke

History

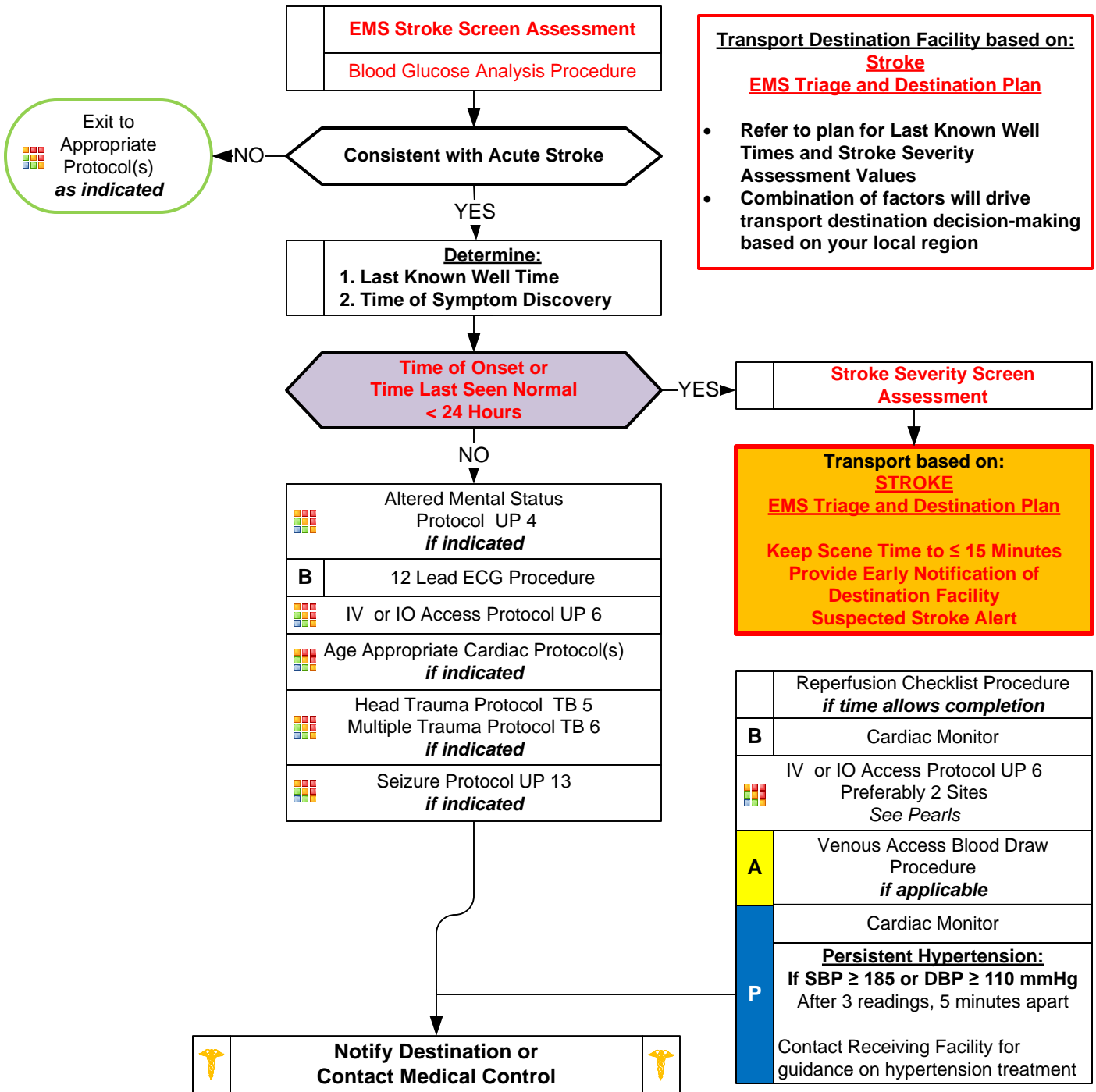
- Previous CVA, TIA's
- Previous cardiac / vascular surgery
- Associated diseases: diabetes, hypertension, CAD
- Atrial fibrillation
- Medications (blood thinners)
- History of trauma
- Sickle Cell Disease
- Immune disorders
- Congenital heart defects
- Maternal infection / hypertension

Signs and Symptoms

- Altered mental status
- Weakness / Paralysis
- Blindness or other sensory loss
- Aphasia / Dysarthria
- Syncope
- Vertigo / Dizziness
- Vomiting
- Headache
- Seizures
- Respiratory pattern change
- Hypertension / hypotension

Differential

- See Altered Mental Status
- TIA (Transient ischemic attack)
- Seizure
- Todd's Paralysis
- Hypoglycemia
- Stroke
 - Thrombotic or Embolic (~85%)
 - Hemorrhagic (~15%)
- Tumor
- Trauma
- Dialysis / Renal Failure



Universal Protocol Section



Suspected Stroke

Pearls

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro**
- **Items in Red Text are key performance measures used in the EMS Acute Stroke Care Toolkit.**
- **Acute Stroke care is evolving rapidly. Time of Onset/ Last Seen Normal may be changed at any time depending on the capabilities and resources of your regional hospital(s).**
- **Refer to your Stroke: EMS Triage and Destination Plan which should be updated when community resources change.**
- **Time of Onset or Last Seen Normal:**
 - **One of the most important items the pre-hospital provider can obtain, of which all treatment decisions are based.**
 - **Be very precise in gathering data to establish the time of onset and report as an actual time (i.e. 13:47 NOT “about 45 minutes ago.”)**
 - **Without this information patient may not be able to receive thrombolytics at facility.**
 - **Wake up stroke: Time starts when patient last awake or symptom free.**
- **Time of Symptom Discovery:**
 - **Time when symptoms of stroke are first noticed by patient, bystanders, witnesses, or family/ caregivers.**
- **Sources of information pertaining to Last Known Well Time or Symptoms Onset:**
 - **You are often in the best position to determine the actual Time of Onset while you have family, friends or caretakers available.**
 - **Often these sources of information may arrive well after you have delivered the patient to the hospital. Delays in decisions due to lack of information may negatively impact patient care.**
 - **Obtain contact information (phone number and name) of best witnesses and give to hospital providers.**
- **The Reperfusion Checklist should be completed for any suspected stroke patient as time allows.**
- **If possible place 2 IV sites, preferably above the wrists, and if possible both in the left upper extremity.**
- **Blood Draw:**
 - **Many stroke centers utilize EMS venous blood samples. Follow your local policy and procedures.**
 - **The differential listed in the UP 4 Altered Mental Status Protocol should also be considered.**
 - **Be alert for airway problems (swallowing difficulty, vomiting/aspiration).**
 - **Hypoglycemia can present as a localized neurologic deficit, especially in the elderly.**
 - **Document the EMS Stroke Screen, Stroke Severity Score, and Stroke Alert notification time in the ePCR or PCR.**
 - **Agencies may use validated pre-hospital stroke screen of choice.**
- **Pediatrics:**
 - **Strokes do occur in children, they are slightly more common in ages < 2, in boys, and in African-Americans.**
 - **Newborn and infant symptoms consist of seizures, extreme sleepiness, and using only one side of the body.**
 - **Children and teenagers symptoms may consist of severe headaches, vomiting, sleepiness, dizziness, and/or loss of balance or coordination.**