

Base Hospital Contact: Required prior to transport for all patients with suspected Stroke or TIA.

1. Assess airway and initiate basic and/or advanced airway maneuvers prn (*MCG 1302*)
2. Administer **Oxygen** prn (*MCG 1302*)
3. Initiate cardiac monitoring (*MCG 1308*)
Perform 12-lead ECG if concern for cardiac ischemia or dysrhythmia
4. Establish vascular access prn (*MCG 1375*) ❶
Establish IV in all patients with LAMS 4 or 5, large bore catheter (16g or 18g) preferred
5. Check blood glucose
If < 60mg/dL or > 400mg/dL, treat in conjunction with *TP 1203, Diabetic Emergencies*
6. Assess for signs of trauma
If traumatic injury suspected, treat in conjunction with *TP 1244, Traumatic Injury*
7. Perform Modified Los Angeles Prehospital Stroke Screen (mLAPSS) on all patients exhibiting local neurologic signs. ❷
The mLAPSS is positive if **all** of the following criteria are met:
 - i. No history of seizures or epilepsy
 - ii. Age 40 years or older
 - iii. At baseline, patient is not wheelchair bound or bedridden
 - iv. Blood glucose between 60 and 400 mg/dL
 - v. Obvious asymmetry-unilateral weakness with any of the following motor exams:
 - a. Facial Smile/Grimace
 - b. Arm Strength
 - c. Grip Strength
8. If mLAPSS is positive, or your primary impression remains stroke despite negative mLAPSS ❷, calculate Los Angeles Motor Score (LAMS) from the mLAPSS motor items:
 - i. Facial Droop
 - a. Absent = 0
 - b. Present = 1
 - ii. Arm Drift
 - a. Absent = 0
 - b. Drifts down = 1
 - c. Falls rapidly = 2
 - iii. Grip Strength
 - a. Normal = 0
 - b. Weak grip = 1
 - c. No grip = 2
9. Verify and document date and time of Last Known Well Time (LKWT) ❸

10. Determine patient destination based on mLAPSS, LAMS and LKWT: ④
 - mLAPSS positive, LAMS 4-5, LKWT < 24 hours → Transport to Comprehensive Stroke Center (CSC) if within 30 min
 - mLAPSS positive, LAMS ≤ 3, LKWT < 24 hours → Transport to closest Stroke Center
 - mLAPSS negative but acute stroke suspected → **CONTACT BASE** for destination

11. Transport with head of bed elevated 30-45 degrees ⑤

SPECIAL CONSIDERATIONS

- ① If LAMS is 4 or greater, place 18 gauge IV if possible to facilitate advanced imaging studies at CSC.
- ② The Modified LAPSS is a validated tool that helps to identify stroke mimics and excludes patients that will not benefit from stroke care. However, it does not identify all strokes and some patients with stroke will be mLAPSS negative. For patients in whom you suspect stroke but are mLAPSS negative, calculate the LAMS and contact the Base to discuss the destination decision. History of prior stroke does not exclude the need to evaluate for possible new deficits. New findings in a patient with prior stroke should be managed similarly to first-time strokes and such patients should be routed to the closest appropriate approved stroke center per Ref. 521.
- ③ LKWT determines the patient's eligibility for TPA and/or interventional procedures for clot removal. Document the name and contact information of the family member, caregiver, or witness who can verify the patient's LKWT and report this information to ED providers. If possible, transport the witness with the patient.
- ④ Using a stroke scale, such as mLAPSS, increases the chances of diagnosing strokes. However, stroke scales do not catch all strokes, including presentations such as aphasia, ataxia and vertigo.
- ⑤ Whenever possible transport patients with suspected stroke with head of bed elevated 30-45 degrees. This reduces risk of aspiration and also reduces elevation in intracranial pressure.