Cerebrovascular Disease Assessment Flow Sheet

TIME *(use military time)*

_____ Onset of symptoms or "last seen well" time (less than 3 hours in duration).

_____ Patient arrives in ED with (or admitted patient develops) signs/symptoms of suspected CVA.

_____ Lab phlebotomist will obtain and deliver to the lab: CBC, PT, aPTT, INR, CP7, HCG, Type & Screen.

_____ Acute stroke team beeper is activated. (Goal: Beeper activation within 15 minutes of patient arrival or start of symptoms **and** stroke team response by phone or in person within 15 minutes of being paged.)

_____ Physician performs a rapid, complete history and physical exam: NIH Stroke Scale score: ____

_____ Order stat un-enhanced head CT scan, stat portable CXR (if indicated) and stat EKG.

_____ Physician assesses patient for inclusion and exclusion criteria.

INCLUSION CRITERIA *(These statements <u>must all be true</u> in order to consider t-PA administration. Check box if statement is true.)*

☐ Ischemic stroke onset within 3 hours of drug administration.

☐ Measurable deficit on NIH Stroke Scale examination (see back of this form).

☐ Clearly defined time of stroke onset (within 180 minutes).

☐ Patient's head CT scan does not show hemorrhage or nonstroke cause of deficit.

☐ Patient's age is greater than 18 years.

EXCLUSION CRITERIA *(A YES to any of the following conditions or findings may exclude the patient from receiving t-PA. The risk/benefit must be weighed by the physician. Check box if statement is true.)*

HISTORY

☐ Patient's symptoms are minor or rapidly improving (examples of mild neurological symptoms include ataxia alone, sensory loss alone, dysarthria alone or minimal weakness).

☐ Patient has had arterial puncture at noncompressible site or lumbar puncture within past 7 days.

☐ Patient had a seizure at onset of stroke.

☐ Patient has had another stroke or serious head trauma within the past 3 months.

☐ Patient had major surgery or other serious trauma within past 14 days.

☐ Patient has known history of intracranial hemorrhage.

☐ Patient has symptoms suggestive of subarachnoid hemorrhage.

☐ Patient has had gastrointestinal or urinary tract hemorrhage within the past 21 days.

☐ Patient has had a myocardial infarction within past 21 days.

☐ Patient has a history of a bleeding disorder (e.g., hemophilia).

☐ Patient has a history of diagnosed brain tumor, cerebral aneurysm or AVM.

☐ Pregnancy

PHYSICAL EXAM

☐ Patient has sustained systolic blood pressure greater than 185 mmHg or diastolic greater than 110 mmHg (on 2 readings 15 minutes apart and refractory to IV labetolol).

☐ Aggressive treatment is necessary to lower the patient's blood pressure.

☐ Positive hemoccult on rectal exam.

☐ Patient has an active bleeding site.

LAB

☐ Patient has received heparin within the past 48 hours and has an elevated aPTT (greater than 35 seconds).

☐ Patient's prothrombin time (PT) is greater than 15 seconds or INR greater than 1.5.

☐ Patient's platelet count is less than 100,000/mm^3.

☐ Patient's serum glucose is less than 50 mg/dL or greater than 400 mg/dL.

☐ Positive HCG.

RELATIVE CONTRAINDICATIONS *(If any of the following statements is true, use t-PA with caution. Check box if statement is true.)*

☐ Patient's head CT scan shows evidence of a large middle cerebral artery (MCA) territory infarction (sulcal effacement or blurring of gray-white junction in greater than one-third of the MCA territory).

☐ Patient has a large stroke with NIH Stroke Scale score greater than 22.

☐ Age greater than 85 years.

All of the inclusion and exclusion criteria have been reviewed and the patient is a candidate to receive t-PA. If NO, proceed to disposition section. ☐ Yes ☐ No

Neurologist (name: _____) calls back and discusses case with physician caring for patient *(Goal: within 15 minutes of being called).* ☐ Yes ☐ No

• Patient has head CT scan performed *(Goal: within 25 minutes of order being written).* ☐ Yes ☐ No

• Physician obtains results of head CT scan from radiologist *(Goal: within 20 minutes of completion of scan).* ☐ Yes ☐ No

• Physician obtains results of CXR, if CXR was indicated *(Goal: within 45 minutes of being ordered).* ☐ Yes ☐ No

• Physician obtains results of necessary lab studies *(Goal: within 45 minutes of being ordered).* ☐ Yes ☐ No

☐ If all criteria for t-PA administration are met, explain risks/benefits to patient and family. Risks include death; stroke; permanent neurologic injury; worsening of stroke symptoms from swelling or bleeding in the brain; bleeding other parts of the body; need for blood transfusions to replace blood or clotting factors; other unexpected complications.

☐ Obtain written informed consent, if possible.

☐ Pharmacy is called to order t-PA (Pharmacy staff will need patient's name, weight and medical record number).

☐ Patient's estimated/stated weight: _____ . Calculated dose for tPA: _____ mg. t-PA arrives in the Emergency Department.

☐ If onset of stroke is still less than 3 hours, start tPA at 0.9mg/kg (but not exceeding 90mg) with 10% as bolus dose & the remainder given over the following hour.

☐ t-PA administration is started *(Goal: within 60 minutes of patient arrival).*

☐ Monitor for unexpected bleeding: (see Stroke Management Policy) Intracranial Hemorrhage Algorithm if patient develops signs/symptoms of bleeding.

☐ Maintain blood pressure less than 180/110.

☐ Patient receiving t-PA must not receive antithrombotic or antiplatelet agents for 24 hours (e.g., aspirin).

DISPOSITION

Admit to: ☐ ICU bed   ☐ Nursing Unit: _____   ☐ Home/Other: _____   ☐ AMA

Comments: _____

Physician's Signature & Credentials: _____   Printed Name: _____   Date: _____   Time: _____

FORM #25861 (8/04)

Saint Vincent Hospital
at Worcester Medical Center
NEUROLOGY DEPARTMENT

Cerebrovascular Disease Assessment Flow Sheet

NIH STROKE SCALE

CATEGORY	DESCRIPTION			INITIAL SCORE	REASSESS. SCORE if indicated
1a. Level of Consciousness	0 = Alert	1 = Drowsy	2 = Stuporous 3 = Coma		
1b. LOC Questions *(month, age)*	0 = Answers Both Correctly	1 = Answers One Correctly	2 = Both Incorrect		
1c. LOC Commands *(open/close eyes, make fist/let go)*	0 = Obeys Both Correctly	1 = Obeys One Correctly	2 = Both Incorrect		
2. Best Gaze *(eyes open; pt. follows finger or face)*	0 = Normal	1 = Partial Gaze Palsy	2 = Forced Deviation		
3. Visual *(introduce visual stimulus to pt.'s visual field quadrants)*	0 = No Visual Loss 2 = Complete Hemianopia	1 = Partial Hemianopia 3 = Bilateral Hemianopia			
4. Facial Palsy *(show teeth, raise eyebrows, squeeze eyes shut)*	0 = Normal	1 = Minor	2 = Partial 3 = Complete		
5a. Motor Left Arm *(elevate extremity to 90˚ & score drift/movement)*	0 = No Drift 3 = No Effort Against Gravity	1 = Drift 4 = No Movement	2 = Can't Resist Gravity 9 = Amputation/Joint Fusion		
5b. Motor Right Arm *(elevate extremity to 90˚ & score drift/movement)*	0 = No Drift 3 = No Effort Against Gravity	1 = Drift 4 = No Movement	2 = Can't Resist Gravity 9 = Amputation/Joint Fusion		
6a. Motor Left Leg *(elevate extremity to 30˚ & score drift/movement)*	0 = No Drift 3 = No Effort Against Gravity	1 = Drift 4 = No Movement	2 = Can't Resist Gravity 9 = Amputation/Joint Fusion		
6b. Motor Right Leg *(elevate extremity to 30˚ & score drift/movement)*	0 = No Drift 3 = No Effort Against Gravity	1 = Drift 4 = No Movement	2 = Can't Resist Gravity 9 = Amputation/Joint Fusion		
7. Limb Ataxia *(finger to nose, heel to shin)*	0 = Absent	1 = Present in One Limb	2 = Present in Two Limbs		
8. Sensory *(pinprick to face, arm, trunk & leg; compare side to side)*	0 = Normal	1 = Partial Loss	2 = Severe Loss		
9. Best Language *(name items, describes a picture, reads sentence)*	0 = No Aphasia 2 = Severe Aphasia	1 = Mild to Moderate Aphasia 3 = Mute			
10. Dysarthria *(evaluate speech clarity by pt. repeating listed words)*	0 = Normal Articulation 2 = Near to Unintelligible	1 = Mild to Moderate Dysarthria 9 = Intubated or Other Barrier			
11. Extinction and Inattention *(use info. from prior testing to identify neglect or double simultaneous stimuli testing)*	0 = No Neglect	1 = Partial Neglect	2 = Complete Neglect		

INITIAL SCORE: _____ Practitioner's Signature: _____ Date: _____ Time: _____

REASSESSMENT SCORE: _____ Practitioner's Signature: _____ Date: _____ Time: _____