Admit/Disch/Transfer
NIH Stroke Scale
Ischemic Stroke IV tPA Checklist
Neurology Call Cases to be discussed with Neurology

Pre-tPA:

☑️ Saline Lock. Place two #20 ga IVs

☐ Normodyne 10 mg, Soln, IVP, Every 10 Minute Interval, Hypertension, HOLD for HR less than 60 bpm, 2 Doses/Times
   (1) To keep systolic BP less than 185 mmHg and diastolic BP less than 110 mmHg
   (2) Notify Provider if BP less than 160/80
   (3) May increase dose to 20 mg but not to exceed a total max dose = 40 mg
   (4) Pre-tPA BP medication order

☐ niCARdipine 25mg in 250mL NS Sodium Chloride 0.9% Tot Vol: 260 mL, Titrate, Soln, IV
   (1) Start at 2.5 mg/hr and titrate by 2.5 mg/hr increments every 5 minutes to keep systolic BP less than 185 mmHg and diastolic BP less than 110 mmHg;
   (2) Notify Provider if BP less than 160/80 mmHg;
   (3) Hold for pulse less than 60 bpm;
   (4) Max dose = 15 mg/hr;
   (5) Pre-tPA BP medication order


☑️ tPA Bolus 0.09 mg/kg, Soln, IVP, ONCE, STAT
   Remove bolus dose from tPA vial and administer IV in a syringe over one minute
   MAX BOLUS DOSE = 9 mg (9 mL)
   Documentation of dose/waste:
   Bolus dose to be administered = _ _ mg
   Infusion dose to be administered = _ _ mg
   Drug wasted from 100mg/100mL vial = _ _ EA (1 EA = 1 mg)

☑️ tPA 0.81 mg/kg, Soln, IVPB, ONCE, STAT, Infuse Over: 1 hr
   MAX INFUSION DOSE = 81 mg
   Documentation of dose/waste:
   Bolus dose to be administered = _ _ mg
   Infusion dose to be administered = _ _ mg
   Drug wasted from 100mg/100mL vial = _ _ EA (1 EA = 1 mg)

Emergent Large Vessel Occlusion/Code Stroke Tier 2

Screen for emergent large vessel occlusion. Consider CTA head and neck in patients with NIHSS greater than 6, patients with cortical signs of stroke and complete hemispheric syndrome within 24 hours of onset
EMMC / Inland / SVH / BHHM Use this order:
☐ CT CTA Head & Neck w & w/o Contrast 70496 & 70498 Stat, Stretcher, Acute Stroke

Mercy / TAMC use these orders:
☐ CT CTA Neck w & w/o Contrast 70498 Stat, Stretcher, Acute Stroke
☐ CT CTA Head w & w/o Contrast 70496 Stat, Stretcher, Acute Stroke
☐ Provider Communication (EMMC) Pre-Embolectomy Prep NURSING: Clipper prep bilateral groin
☐ SP CNS Arterial Thrombectomy/Infusion Stat, Stretcher
☐ Foley Cath Insertion Place Foley before tPA bolus is given if patient is going for embolectomy.

Provider Signature: ____________________________ Print Name: ____________________________
Date: ____________ Time: ____________

PROVIDERS MUST EXERCISE INDEPENDENT CLINICAL JUDGMENT WHEN USING ORDER SETS
December 2017 (Revised 3/18)
Patient Care

Post-tPA:

☑ Diet NPO, No exceptions, NPO until nursing completes the Dysphagia Screen (Includes oral meds).

☑ Dysphagia Screen
  (1) If patient passes the screen, then advance diet as tolerated to Cardiac Diet;
  (2) If patient fails the screen, patient to remain NPO (Includes oral meds) & nursing to order Speech Therapy Eval & Treatment / Bedside Swallowing.

☑ Vital Signs (Frequent) Every 15 minutes for 2 hours, every 30 minutes for 6 hours, then every hour post-tPA for 16 hours

☑ Neuro Checks (Frequent) Every 15 minutes for 2 hours, every 30 minutes for 6 hours, then every hour post-tPA for 16 hours. Notify if neurological deterioration, seizure activity, headache, nausea/vomiting, or allergy.

☑ Notify If Stroke Ischemic (With tPA) Module
  (1) Systolic BP greater than 180 or diastolic BP greater than 105 mmHg for 24 hours post-tPA;
  (2) Pulse greater than 120 or less than 50;
  (3) If major bleeding or a change in neuro status occurs, allergic reaction, headache or nausea/vomiting discontinue tPA and notify provider immediately.

☑ Activity Progressive Ambulation, as tolerated with head of bed elevated 30 degrees. Turn every 2 hours, out of bed with assistance only.

☑ Activity. Progressive Ambulation, as tolerated with head of bed elevated 30 degrees. Turn every 2 hours, out of bed with assistance only.

☑ Telemetry Monitoring Reason: Acute Stroke; arrhythmia monitoring; Re-assess need in 24 hours

☑ Bedside Glucose Monitoring Every 6 Hours,
  1) Discontinue if glucose 90 - 150 mg/dL for 24 hours
  2) Notify provider if bedside glucose GREATER THAN 150 mg/dL
  3) If bedside glucose LESS THAN 70 mg/dL see JPP Hypoglycemia for orders

☑ Oxygen Via: Nasal Cannula, Maintain O2 sat greater than 94% using appropriate oxygen device

☑ Oxygen. Via: Nasal Cannula, Maintain O2 sat greater than 94% using appropriate oxygen device

☑ Continuous Pulse Oximetry. Continuous PULSE OXIMETRY for 24 hours to maintain O2 Sat greater than 94% using appropriate oxygen device

☑ Precautions Bleeding Precautions, for 24 hours post Post-tPA
  (1) Place Bleeding Precautions sign over head of bed
  (2) Hemoccult/Gastroccult all body fluids
  (3) Monitor puncture sites for bleeding
  (4) No NG Tube placement or IM injections
  (5) No Foley Catheter for 2 hours (preferably for 24 hours)
  (6) No anticoagulation or antiplatelets for 24 hours
  (7) Notify physician for evidence of bleeding or neurological deterioration

☑ Education Stroke Teaching, Provide and document individualized teaching and Stroke Education booklet

Continuous Solutions

☑ Sodium Chloride 0.9%
  ☐ Tot Vol: 1,000 mL, Flow Rate: 75 mL/hr, Soln, IV, Continuous for: 24 hr (DEF)*
  ☐ Tot Vol: 1,000 mL, Flow Rate: 100 mL/hr, Soln, IV, Continuous for: 24 hr

Provider Signature: _______________________ Print Name: _______________________

Date: ____________ Time: ____________

PROVIDERS MUST EXERCISE INDEPENDENT CLINICAL JUDGMENT WHEN USING ORDER SETS

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Medications

**Antihypertensives Post-tPA**

Use meds in this sequence: Labetalol IVP, Labetalol Infusion, Nicardipine.

- Normodyne 10 mg, Soln, IVP, Every 10 Minute Interval, PRN, Hypertension, HOLD for HR less than 60 bpm, 2 Doses/Times
  - (1) Keep systolic BP less than 180 mmHg and diastolic BP less than 105 mmHg
  - (2) May increase dose to 20 mg IVP but do not exceed total max dose of 40 mg
  - (3) Hold for BP less than 140/90 or otherwise indicated by Neurologist
  - (4) If BP uncontrolled after 2 doses notify Provider to obtain IV Labetalol Infusion order
  - (5) Post-tPA BP medication order
  - (6) Administer IVP over 2 minutes

- Labetalol 500mg/100mL INFUSION Undiluted Injectable Solution Tot Vol: 100 mL, Titrate, Soln
  - (1) Start at 2 mg/min and may titrate by 0.5 mg/min every 5 minutes to keep systolic BP less than 180 mmHg and diastolic BP less than 105 mmHg; Max Dose = 8 mg/min
  - (2) Hold for pulse less than 60 or BP less than 140/90 or otherwise indicated by Neurologist
  - (3) Total cumulative dose not to exceed 300 mg in 24 hours
  - (4) Post-tPA BP medication order

- niCARdipine 25mg in 250mL NS Sodium Chloride 0.9% Tot Vol: 260 mL, Titrate, Soln, IV
  - (1) Start at 2.5 mg/hr and titrate by 2.5 mg/hr increments every 5 minutes to keep systolic BP less than 180 mmHg and diastolic BP less than 105 mmHg;
  - (2) Hold for pulse less than 60 bpm or BP less than 140/90 mmHg or otherwise indicated by Neurologist;
  - (3) Max dose = 15 mg/hr;
  - (4) Post-tPA BP medication order

**Platelet Aggregation Inhibitors**

Hold anti-platelet & anti-coagulation therapy for 24 hours post-tPA administration

- +24 Hours aspirin
  - 325 mg, EC Tablet, PO, Daily (DEF)*
    - Start if CT Brain is negative for bleeding, May give Aspirin 300 mg PR if unable to take PO
  - 81 mg, EC Tablet, PO, Daily
    - Start if CT Brain is negative for bleeding, May give Aspirin 300 mg PR if unable to take PO
  - 300 mg, Supp, RECTAL, Daily
    - Start if CT Brain is negative for bleeding

- +24 Hours Aggrenox 1 CAP, Extended Release Capsule, PO, Twice Daily Start if CT Brain is negative for bleeding

- +24 Hours Plavix 75 mg, Tab, PO, Daily Start if CT Brain is negative for bleeding

**Statins**

Generally recommended for adults greater than 21 years of age with clinical ASCVD regardless of LDL.

High Intensity:
- Lipitor
  - 40 mg, Tab, PO, Daily (DEF)*
  - 80 mg, Tab, PO, Daily
- Crestor (Atorvastatin Intolerant Only)
  - 20 mg, Tab, PO, Daily (DEF)*
  - 40 mg, Tab, PO, Daily

Moderate Intensity:
- Lipitor 20 mg, Tab, PO, Daily
- Crestor (Atorvastatin Intolerant Only) 10 mg, Tab, PO, Daily

Provider Signature: __________________________  Print Name: __________________________

Date: ____________ Time: ____________

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December 2017 (Revised 3/18)
Laboratory

- Lipid Profile with Reflex BLOOD, AM, Fasting
- Consider ordering Hemoglobin A1c if the patient is Diabetic.
- Hemoglobin A1c w/ estimated Average Glucose BLOOD, AM
- Hemoglobin A1c BLOOD, AM
- Rapid Urine Drug Screen URINE, Stat
- Rapid Urine Drug Screen URINE, Stat
- Rapid Urine Drug Screen URINE, Stat
- Rapid Urine Drug Screen URINE, Stat
- Rapid Urine Drug Screen URINE, Stat

Tests/Procedures

- +24 Hours CT Brain without Contrast 70450 Timed Study, Stretcher, Acute Stroke post-tPA treatment; Do 24 hours post-tPA
- INP Transcranial Doppler Complete Start: T:N evaluate for vessel occlusion, acute stroke.
- INP Transcranial Doppler Complete Start: T:N with shunt study evaluate for PFO.

If MRI Head is ordered, consider adding MRA Neck in lieu of Duplex Ultrasound.(NOTE)*
- MRI Head 70551 Expedite, Stretcher, Acute Stroke
- MRI Communication MRI Head, Expedite, ONCE, Reason: Acute Stroke

Vessel Imaging

Option 1:
- If patient has not already had vessel imaging (i.e. STAT CTA Head & Neck from Code Stroke PowerPlan), order MRA Head and Carotid U/S
  - MRA Head without Contrast 70544 Expedite, Stretcher, Acute Stroke
  - MRI Communication MRA Head without Contrast, Acute Stroke, ONCE
  - VL Carotid Artery Bilateral Expedite, Stretcher, Acute Stroke
  - US Carotid Bilateral Expedite, Stretcher, Acute Stroke
- Other options include:
  - Option 2:
    - If high clinical suspicion of carotid disease and patient needs urgent risk stratification, order MRA Head and MRA Neck(NOTE)*
      - MRA Head without Contrast 70544 Expedite, Stretcher, Acute Stroke
      - MRI Communication MRA Head without Contrast, Acute Stroke, ONCE
  - Do not order MRA neck with contrast for patients with renal disease
    - MRA Neck w/Contrast 70548 Expedite, Stretcher, Acute Stroke
    - MRI Communication MRA Neck w/Contrast, Acute Stroke, ONCE
  - Option 3:
    - Consider CTA Head and Neck if MRI Head and Neck are not feasible (e.g. patient has pacemaker)
    - EMMC / Inland / SVH / BHMH Use this order:
      - CT CTA Head & Neck w & w/o Contrast 70496 & 70498 Stat, Stretcher, Acute Stroke

Provider Signature: _______________________ Print Name: _______________________
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PROVIDERS MUST EXERCISE INDEPENDENT CLINICAL JUDGMENT WHEN USING ORDER SETS
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Mercy / TAMC use these orders:

- CT CTA Neck w & w/o Contrast 70498 Stat, Stretcher, Acute Stroke
- CT CTA Head w & w/o Contrast 70496 Stat, Stretcher, Acute Stroke

**Echocardiography**

- EC Echocardiogram 2D Expedite, Stretcher, with bubble study. Acute Stroke; Check for thrombus
- US Echocardiography 2D Expedite, Stretcher, with bubble study. Acute Stroke; Check for thrombus
- EV Echocardiogram Complete 2D Expedite, Stretcher, with bubble study. Acute Stroke; Check for thrombus
- EV Echocardiography 2D Complete Expedite, Stretcher, with bubble study. Acute Stroke; Check for thrombus
- EC Echocardiogram 2D Complete Expedite, Stretcher, with bubble study. Acute Stroke; Check for thrombus

**Consults**

- Physical Therapy Evaluation and Treatment Strengthening and Mobility, Acute Stroke
- Occupational Therapy Evaluation and Treatment ADL’s, Acute Stroke
- Speech Therapy Evaluation and Treatment
  - Cognition/Perception, Acute Stroke (DEF) *
  - Language, Acute Stroke
  - Bedside Swallowing, Acute Stroke
- Speech Therapy Evaluation
  - Cognition/Perception, Acute Stroke (DEF) *
  - Language, Acute Stroke
  - Bedside Swallowing, Acute Stroke
- INP Care Management Consult
  - Discharge Planning (DEF) *
    - Acute Stroke
  - Financial Concerns
    - Acute Stroke
  - Emotional Support
    - Acute Stroke
- INP Consult Acute Rehab Consult automatically goes to Rehab InBox
- Rehab Evaluation Acute Stroke
- INP Dietary Consult Stroke risk factor modification

Provider Signature: ____________________________ Print Name: ____________________________

Date: ____________ Time: ____________