Banner Health

Provider Orientation: Care and Treatment of Acute Stroke Patients

Objectives:

- Identify location of Stroke Protocols and facility specific process flows
- Utilize protocols for Stroke Alerts
- Knowledge of current available Stroke power plans.
- Apply standardized Stroke Assessment tools to assist in the early recognition of Stroke symptoms
- Identification, treatment, and continuous monitoring of an Acute Stroke patient
- Knowledge of Stroke Core Measures and Guidelines

In accordance with the Joint Commission Standard DSDF.1.04 for Disease Specific Certification (Stroke)

"Orientation provides information and necessary training pertinent to the practitioner's responsibilities. **Completion of the orientation is documented**"

Thank you for your time in reviewing this information.

Stroke Practice Guidelines and Facility Specific Process Flows

Clinical Practice Guidelines

Banner Clinical Practice Guidelines are located on the Banner Connect site.

Stroke Resource Material

All forms related to Stroke Alert are located on the Banner Connect site or in stroke binders', (facility dependent)

Joint Commission Standard: DSPR 1.01

Practitioners have access to reference materials, including clinical practice guidelines, in either hard copy or electronic format. Protocols and care paths (preprinted or electronic documents) are available in the emergency department, acute care areas, and stroke unit for the acute assessment and treatment of patients with ischemic or hemorrhagic stroke.

Stroke Alert Provider Roles and Responsibilities

- Responds to Stroke Alert
- Drives Stroke Alert process forward.
- Assists in NIHSS and VAN assessments.
- Orders appropriate diagnostics.
- Decision Making- IV Thrombolytics
- Consults with Neurology
- Discusses Risk/Benefit for Thrombolytic or Mechanical Endovascular Reperfusion
- Facilitates HLOC Transfer when needed

Stroke Assessment and Diagnostics

Presentation: BEFAST +, VAN +/-, Last Known Well w/in 24h

Assessment: VAN, NIHSS

Diagnostics: CT head/brain without for Stroke Alert, CTA/CTP head/neck for Stroke Alert, Rapid sequence MRI

Labs: Glucose, PT/INR, PTT, CBC, BMP, Troponin

Treatment/management:

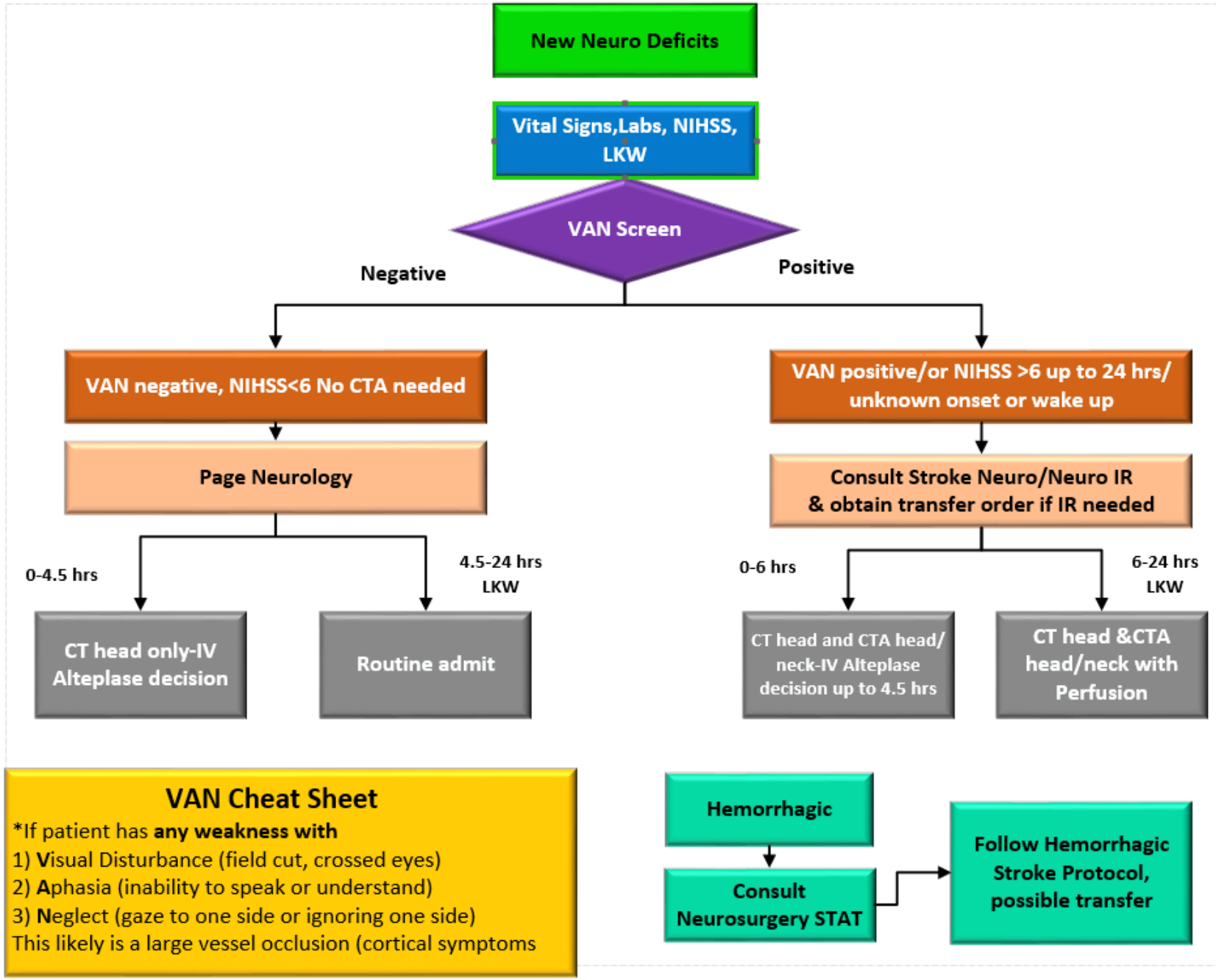
Airway management

BP management

IV Thrombolytic Therapy

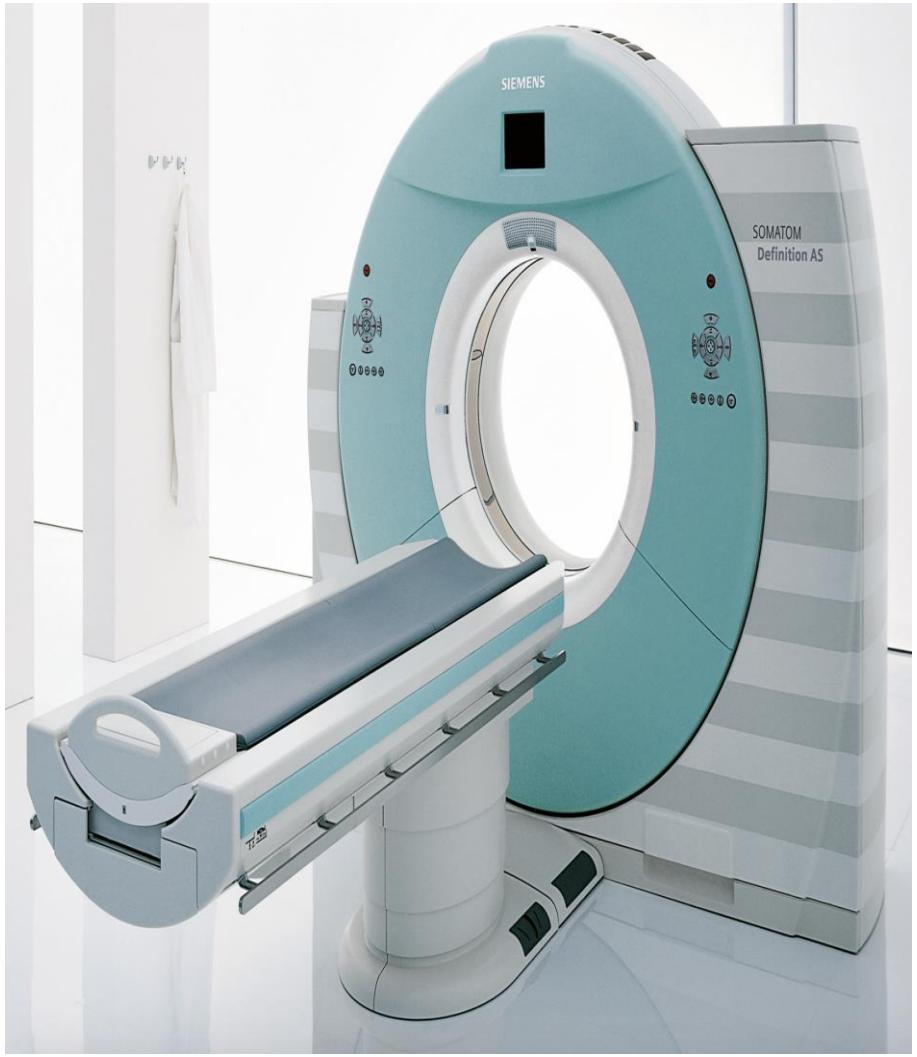
Mechanical Endovascular Reperfusion (MER) Therapy

Simplified Stroke Alert Process Flow*



*This is a simplified flow of general guidelines for a stroke process. Each facility may have distinctions based on resources..

Initial Medical Imaging



CT head | Type: | All Orders

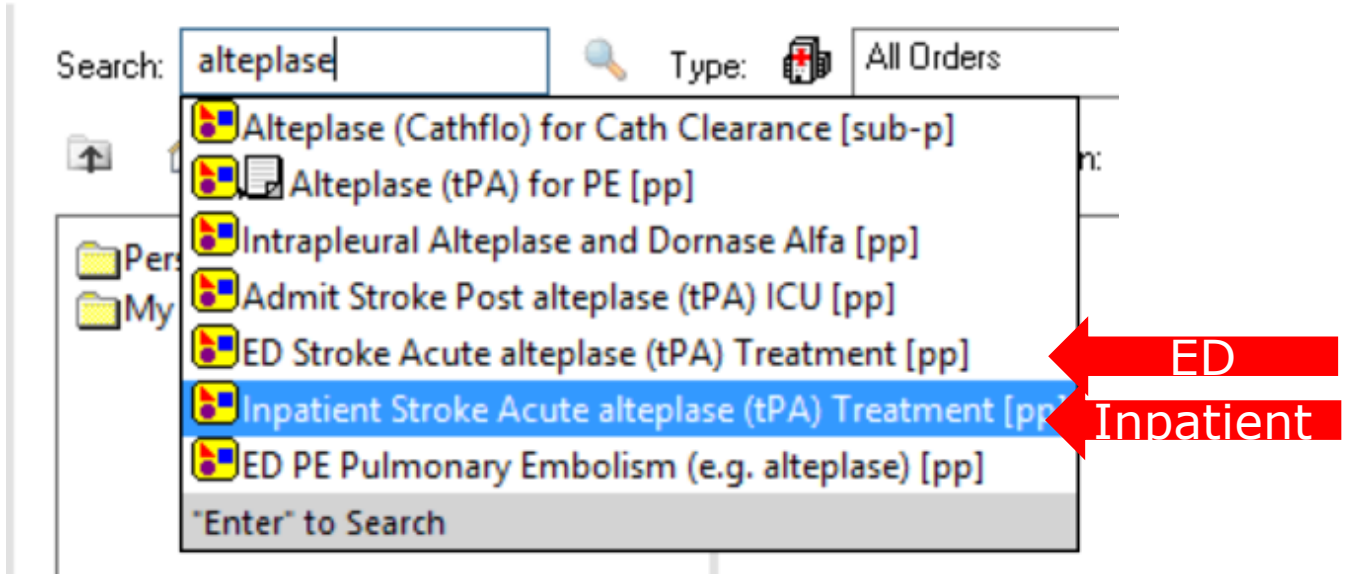
- CT Head/Brain W/+W/O Contrast
- CT Head/Brain W/Contrast
- CT Head/Brain W/O Contrast
- CT Head/Brain W/O for Peds Head Trauma Advisor
- CT Head/Brain W/O for Stroke Alert
- CT Head/Brain/Cerv Spine W/O Contrast
- CT Head/Brain/Maxillofacial W/O Contrast
- CT Ang Head W+/or WO + Recon Stk Alt
- CT Ang Head/Neck W+orW/O+Post Stk Alt — <6 hrs
- CT Ang Head/Neck W+orW/O+Rcn+Prf Stk Alt — >6 hrs perfusion
- CT Perfusion Analysis — BTMC

CTA/CTP for suspected Large Vessel Occlusion **GUIDELINE**

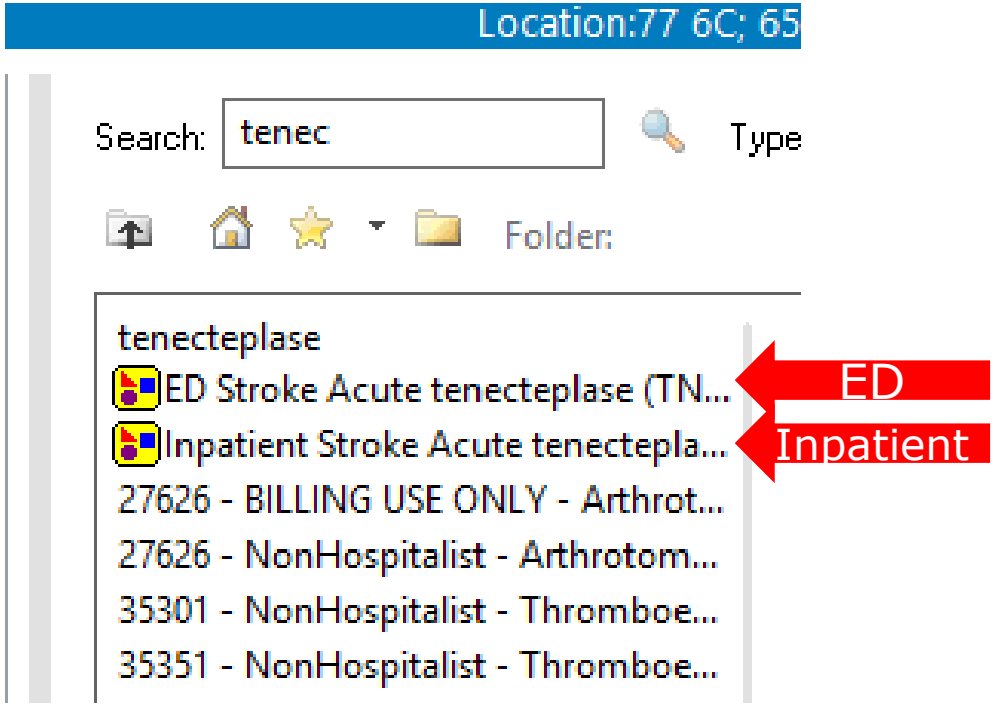
- <6 hours from symptom onset CTA Head/Neck
- >6 hours from symptom onset CTA w/Perfusion Head/Neck

Ordering IV Thrombolytic

AZ and Colorado Facilities



Banner Wyoming MC



Stroke Power Plans

ED

- ED Stroke Acute Initial
- ED Non-Acute Initial
- ED Stroke Acute Alteplase (tPA) treatment

This power plan is currently in build phase and might not be immediately available

- ED Hold Stroke Intracerebral Hemorrhage (ICH)

Inpatient/OBS

These powerplans are currently being updated

- Stroke-TIA
- Ischemic Stroke Post IV Thrombolytics (Alteplase/Tenecteplase)
- Admit Stroke Intracerebral Hemorrhage (ICH)
- Admit Subarachnoid Hemorrhage (SAH)- BUMCP, BUMCT, BTMC, BDMC only

Intervention

These powerplans are currently in build phase and might not be immediately available

- Ischemic Stroke Post Thrombectomy
- Ischemic Stroke Post Thrombectomy and Thrombolytic

Monitoring of an Acute Stroke Patient

Blood Pressure parameters for both **Ischemic** and **Hemorrhagic** stroke patients:

- Hemorrhagic Stroke BP parameters:
  - **ICH-SBP <140 or 160 systolic depending on the recommended treatment plan per neurology**
  - **SAH-SBP >120 and <140 pre-treatment (aneurysm not secured)**

- Ischemic Stroke BP parameters **without** IV thrombolytics - Permissive HTN for 24 hours or per Neurology

- Ischemic Stroke BP parameters with IV thrombolytics - **<185/110 to start, then <180/105** for 24hrs post treatment

Advanced neuro checks and NIHSS by nursing

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Joint Commission Core Measure/Guideline	Description	Provider Responsibilities
STK 1 VTE PROPHYLAXIS by end of day 2.	Ischemic or hemorrhagic stroke patients receive VTE Prophylaxis OR Documentation of a contraindication	Use the VTE advisor and order prophylaxis for patient. ➢ If no prophylaxis is indicated then BOTH forms of prophylaxis need to be addressed as contraindicated (Pharmacological & mechanical)
STK 2 Discharged on Antithrombotic Therapy	Ischemic stroke patients are prescribed antithrombotic therapy at discharge OR Documentation of a contraindication	Prescribe antithrombotic at discharge when completing Depart Med Rec or document a contraindication
STK 3 Anticoagulation Therapy for Atrial Fibrillation/Flutter	Ischemic stroke patients with atrial fibrillation/flutter are prescribed anticoagulation therapy at discharge OR Documentation of a contraindication	Prescribe anticoagulation therapy at discharge when completing Depart Med Rec or document a contraindication

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Joint Commission Core Measure/Guideline	Description	Provider Responsibilities
STK 4 Thrombolytic Therapy	Acute ischemic stroke patients who arrive at the hospital within 2 hours of time last known well are considered for thrombolytic therapy w/in 3 hours.	Order IV Thrombolytic if appropriate: ED Stroke Acute Alteplase (tPA) Treatment [pp] • If there is a delay in initiating thrombolytic- delays in thrombolytic therapy need to be explicit. • If thrombolytic is contraindicated documentation needs to be explicit.
STK 5 Antithrombotic Therapy By End of Hospital Day Two	Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2 OR Documentation of a contraindication	Order antithrombotic prior to end of hospital day 2 so it has time to be administered prior to the end of hospital day 2 or document a contraindication
STK 6 Discharged on Statin Medication	Ischemic stroke patients are prescribed a statin medication at hospital discharge. (**Age <75 require an Intensive Statin if discharged on Statin medication. Age >75 require a mod/int Statin medication at discharge**) OR Documentation of a contraindication	Prescribe **appropriate** statin therapy at discharge when completing Depart Med Rec or document a contraindication. Order Lipid profile on admission or < 48 hours of patient arrival. (lipid profile in last 30 days is adequate)

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Joint Commission Core Measure/Guideline	Description	Provider Responsibilities
STK 8 Stroke Education	Ischemic or hemorrhagic stroke patients or their caregivers were given educational materials during the hospital stay.	Ensure medication reconciliation is complete and accurate and make sure discharge summary and medication reconciliation match
STK 10 Assessed for Rehabilitation	Ischemic or hemorrhagic stroke patients were assessed for rehabilitation services OR Documentation of a contraindication	Document order/assessment for rehab. IF patient has returned to baseline it **can not** be assumed that this is the reason no Rehab assessment was ordered it must be clear: **Example** "Patient has returned to baseline no need for REHAB at this time" , must be in provider note.
Diabetic Measure (2020)	Diabetic patients or newly diagnosed diabetics receive diabetes treatment in the form of glycemic control (diet or medication) or follow up appointment for diabetes management scheduled at discharge	For patients with an A1C >7, evaluate current medication regimen. Consider adding a cardioprotective antihyperglycemic medication (i.e., SGLT-2 or GLP-1) or document a reason for not prescribing while in the facility or deferring decision to primary care or endocrinologist.

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Thank you.

Banner Health Joint Commission Certified Stroke Centers:

BBMC
BBWMC
BDMC
BDWMC
BEMC
BOMC
BTMC
BUMC-P
BUMC-T
BUMC-T South
BNCMC
BWYMC