Hendrick Health Heart Attack and Stroke Program Information

AMI Program Goals / Quality Measures

- **Door to ECG ≤ 10 Minutes**
- **Activation to patient arrival in Cath Lab ≤ 30-45 minutes**
- **EMS First Medical Contact (FMC) to PCI ≤ 90 minutes**
    - **Door to PCI Goal ≤60 min (EMS Arrivals)**
    - **If transport time >45 min, Door to PCI must be <30 min with FMC to PCI ≤120 min**
- **Transfers:**
    - **Arrival at first hospital to PCI at Hendrick ≤ 120 minutes (Door to Door to PCI)**
- **Risk stratification Tool- HEART Score**
    - Use for chest pain/UA/NSTEMI patients to determine risk for MACE
- **High Sensitivity Troponin I**
    - Trend to identify a rise and/or fall
    - 0, 2 hour strategy
- **ECG stat on arrival.**
    - Consider serial ECGs every 15-30 minutes for the first hour if initial ECG does not meet STEMI criteria and there is a high suspicion for ACS

Medications:

- Aspirin on arrival
- Nitroglycerin
- Consider initiating high intensity statin therapy- i.e. rosuvastatin ≥ 20 mg (moderate intensity is reasonable if >75 years of age)
- Heparin or Lovenox (ACS dosage)
- P2Y12 inhibitor

ECG criteria for STEMI: > 1 mm ST elevation at the J-point in 2 contiguous leads, with the exception of leads V2-V3 which require > 2 mm ST elevation in men >40 years; > 2.5 mm in men; 1.5 mm in women regardless of age.

STEMI Equivalents: True posterior Ml, multi-lead ST depression with coexistent ST elevation in lead aVR, characteristic diagnostic criteria in the setting of new LBBB.

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<u>In-Hospital STEMI</u> Patients with signs and symptoms consistent with ACS AND meeting STEMI criteria.

The Rapid Response Team & House Supervisor

- **Assist with patient complaints of ACS signs & symptoms**
- **ECG**
    - **If meets STEMI criteria, house supervisor will facilitate a call between you and the Interventional Cardiologist on-call for STEMI**
        - If primary PCI is indicated, the **House Supervisor or RRT** member will activate an **"In-House STEMI code"** to activate the correct team.

<u>Discharge Medication/Referral Requirements for Cardiac Patients</u>

Rx at DC	Aspirin	P2Y12	Statin	Beta Blocker	ACE/ARB	Aldosterone	Cardiac Rehab
AMI (STEMI/NSTEMI)	√	√ **Even if medically managed**	√ High intensity. (Age >75 mod. Intensity)	√	√ for LVSD (EF <40%)		√ **Even if medically managed**
PCI (Balloon &/or Stent)	√	√ Only for Stent	√				√
ICD				√ Only if EF <40% or has prior MI	√ for LVSD (EF <40%)		
Heart Failure				√ Bisoprolol, Carvediolol, Metoprolol succinate CR/XL	√ ACE/ARB or ARNi (Entresto)	√	
CABG ***(If PCI same visit, also include PCI meds)***	Antiplatelet (Includes ASA &/or P2Y12)		√	√	√ for LVSD (EF <40%)		√
Peripheral Intervention (Arterial)	Antiplatelet (Includes ASA &/or P2Y12)		√				

Guideline Directed Medication must be prescribed or a physician documented reason to omit MUST be found in the chart.

Contraindications/intolerances must be explicitly documented within the medical record.

Documentation should clarify if final diagnosis is NSTEMI type 2 or other non-cardiac troponin elevation.

Hendrick Health Heart Attack and Stroke Program Information Cont.

Stroke Quality Measures

- NIHSS on arrival or onset of symptoms
- Yale Dysphagia Screen by RN (prior to ANY oral intake, including medications)
    - If fails,
        - Patient MUST remain NPO
        - Speech Therapy consult initiated for swallow evaluation
- Smoking/tobacco cessation must be addressed if current use or use within one year (counseling/pharmaceutical cessation/resources to quit)

Stroke Core Measures *

- Thrombolytic therapy for acute ischemic stroke arriving within 4.5 hours of onset. Administered within 60 minutes or documentation of reason for delay (goal <30-45minutes)
    - Hendrick Health utilizes **tenecteplase 0.25 mg/kg** (max dose 25 mg) IVP over 5 seconds.
- Antithrombotic therapy by end of hospital day 2 (Ischemic CVA or TIA)
- VTE prophylaxis Mechanical and/or Chemical by end of day 2
- Lipid Panel within 48 hours of arrival or 30 days prior (Ischemic CVA or TIA)
- Statin therapy (Ischemic CVA or TIA) Refer to intensities listed below
- Discharge (Ischemic CVA or TIA)
    - Antithrombotic
    - Anticoagulant for A-fib/flutter (history or current)
    - Intensive statin therapy (patients ≤75 years of age) **OR**
    - Moderate intensive statin (patients > 75 years of age)
- Stroke Education (including smoking cessation, diabetes management and secondary prevention)
    - Diabetic educator consult if Hgb A1c >7
    - Consider medication adjustment or endocrinology referral for uncontrolled diabetes mellitus
- Assessed for Rehab (Physical, Occupational and Speech)

***A patient-centered reason for NOT ordering/prescribing is required to be documented**

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Anti-thrombotic

All possible stroke or TIA patients MUST have an anti-thrombotic by end of hospital day 2

Medications include: *Even if ruling out a patient for stroke or TIA, it is a MUST for them to be placed on at least one of these medications.*

- Aspirin (per rectum if NPO or failed dysphagia screen)
- Heparin Drip
- enoxaparin 1 mg/kg twice daily
- apixaban/dabigatran etexilate/rivaroxaban
- warfarin
- clopidogrel/tricagrelor

*****For secondary prevention after ischemic stroke or TIA, short term use of DAPT **(aspirin and clopidogrel**) should be considered.

Viz.ai Artificial intelligence program utilized by Hendrick Health to alert the team to suspected large vessel occlusions (LVO) or intracerebral hemorrhages (ICH)

- Only alerts for suspected anterior circulation LVO
- Mobile phone Viz.ai app (ED providers/Intensivist/Neurosurgeons/Interventional Radiology)
- Hendrick Hub under "applications" – scroll down to the bottom for "Viz.ai" link
  Desktop link:
  https://login.viz.ai/login
  Contact Martee Tebow mtebow@hendrickhealth.org for user access

In-House Stroke Code

Rapid Response Team & House Supervisor respond if your patient exhibits signs and symptoms of possible stroke

Enter orders titled: "Stat CT head without contrast per Stroke Protocol" and "CT Angio Head and Neck per Stroke Protocol"- This alerts the radiologist to read first!

Teleneurology available 24/7 for acute stroke codes.

Hendrick Health Heart Attack and Stroke Program Information Cont.

Emergency Department Stroke Code

Time goals (ED):

- Door to ED Physician- 10 minutes
- Point of Care Glucose- 10 minutes
- Door to CT Scan per stroke protocol- 15 minutes
- Door to CT Scan resulted – 20 minutes
- STAT CTA of head and neck per stroke protocol
- Tele-Neurology call to screen – 15 minutes (Consult entered at time of Stroke Code/Alert)
- Door to lab work, ECG, CXR (if ordered)- 25 minutes
- Door to thrombolytic
    - Benchmark: 50% <30 min; 75% <45 min; 100% <60 min. Please document a **patient centered reason** for not administering in <30, <45, <60 min.
- STAT BUN / CR (done on I-stat machine)
- **Consider thrombolytic up to 4 ½ hours from Last Known Normal (LKN) or Thrombectomy for Large Vessel Occlusion (LVO) up to 24 hours from LKN**
    - **Hendrick Medical Center North has 24/7 thrombectomy coverage for LVO. All other Hendrick locations will coordinate transfer to North through the Transfer Center.**
        - If Dr. Eddleman or Dr. Rittimann determine a transfer is needed to a comprehensive stroke center, consider transfer to UT Southwestern (current transfer agreement in place). This will be an uncommon occurrence and for patient specific reasons.

Intracerebral hemorrhage (ICH) Patients diagnosed with an ICH should be treated to achieve a **systolic blood pressure of ≤140 mm/hg (maintain between 130-150 mm/hg)**. Please include patient specific blood pressure parameters in EMR and prn medication to achieve goal.

Consider reversal agent if patient is on DOAC or warfarin with INR >1.4. Goal <60 min

Admit to Designated Stroke Units

HMC North:
P5 or CCU (if requiring higher level of care) **OR**
IMCU is available for post thrombolytic patients
(Note: Post endovascular thrombectomy patients should be admitted to CCU)
Hendrick Medical Center South:
PCU or ICU (*if requiring higher level care or post thrombolytic)*

Hendrick Health Heart Attack and Stroke Program Information Cont.

Order Sets - Help ensure clinical practice guidelines are followed

Clinical Practice Guidelines

- AMI & Stroke Program's Clinical practice guidelines can be found on the Hendrick website **www.hendrickhealth.org**
- Enter "For Physicians" at bottom of page
- Tab-Quick Links
  - "ACS (STEMI/NSTEMI) Clinical Practice Guidelines"
  - "Stroke clinical Practice Guidelines"

PHYSICIAN PROMPT via an Artifact Query
You may be asked to document a patient centered reason for not prescribing a guideline directed medication for a patient diagnosed with a Stroke or AMI. This document is a discharge summary addendum and must be signed within 30 days of discharge.

Certifications/Designations
Hendrick Medical Center and Hendrick Medical Center South
Joint Commission Primary Heart Attack Center
Joint Commission Primary Stroke Center/DSHS Designation
Hendrick Medical Center Brownwood- Pending Certifications

Program Coordinators
Abilene
Linda Moffatt - Heart Attack Coordinator 325-428-5776 or 325-670-3519
Bea Boggs - Stroke Coordinator 325-428-2425 or 325-670-3519
Gail Scruggs - Heart Attack/Stroke Nurse Navigator 325-670-3412
Brownwood
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Medical Directors
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