Hendrick Medical Center and Hendrick Medical Center South

AMI Program Goals / Quality Measures

- **Door to ECG < 10 Minutes**
- **Activation to patient arrival in Cath Lab < 30-45 minutes**
- **EMS First Medical Contact to Balloon (FMC2B) < 90 minutes (if transport time >45 min, D2B must be <30 min with FMC2B <120 min)**
    - **Door to Balloon (D2B) <60 min**
- **Transfers:**
    - **Arrival at first hospital to PCI at Hendrick < 120 minutes (Door to Door to Balloon (D2D2B)**
- **Risk stratification Tool**
    - Use for UA/NSTEMI patients to determine risk for MACE (HEART score)
- **Troponin**
    - Arrival and 3-6 hours later (trend if ongoing ischemic symptoms and suspicion for ACS)
- **ECG stat on arrival.**
    - Serial ECGs every 15-30 minutes for the first hour for patients with no initial STEMI, but high suspicion for ACS

Medications:

- Aspirin on arrival
- Heparin or Lovenox (ACS dosage)
- Nitroglycerin
    - Unless suspected right ventricle involvement- patient may require IV fluids or recent phosphodiesterase inhibitor use
- P2Y12 inhibitor (typically given in cath lab)

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.

<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.

STROKE- Joint Commission Primary Stroke Center Certification
(Hendrick Medical Center and Hendrick Medical Center South)

Stroke Quality Measures

- NIHSS on arrival or onset of symptoms
- Yale Dysphagia Screen by RN (prior to ANY oral intake, including medications)
    - If fails,
        - MUST remain NPO
        - Speech Therapy consult initiated for swallow evaluation

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)
- 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
- Assessed for Rehab (PT,OT,ST)

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

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

- Aspirin
- Heparin Drip
- enoxaparin 1 mg/kg twice daily

- apixaban/dabigatran etexilate/rivaroxaban
- warfarin
- clopidogrel/ticagrelor
- 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.

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

In-House Stroke Code

Rapid Response Team & House Supervisor
Assist if your patient complains of stroke like signs/symptoms
Stat CT head non-contrast per stroke protocol and CTA head and neck per stroke protocol
Teleneurology available 24/7 for acute stroke codes

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
- 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 Well (LKW) or Thrombectomy for Large Vessel Occlusion (LVO) up to 24 hours from LKW**
    - **If LVO and no local interventional coverage for thrombectomy, transfer to closest Comprehensive Stroke Center (CSC)- Texas Health Fort Worth. UT Southwestern is another alternative CSC with an existing transfer agreement in place.**

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.

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)*

Order Sets are available for your convenience to help ensure 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.

Program Coordinators
Martee Tebow - North Senior Heart Attack/Stroke Coordinator (325-670-3648)
Linda Moffatt - South Heart Attack Coordinator (325-428-5776)
Bea Swisher - South Stroke Coordinator (325-428-2425)
Gail Scruggs - North Heart Attack/Stroke Nurse Navigator (325-670-3412)

Medical Directors:
Dr. David McCain- Heart Attack Program Hendrick North/South
Dr. Justin Cormack- Stroke Program Hendrick North
Dr. Travis MacKenzie - Stroke Program Hendrick South