



# Coastal Bend Regional Advisory Council Trauma Service Area - U

## STEMI SYSTEM PLAN

Revised/ Reviewed/ Approved- **December 2021**

### BYPASS PROTOCOL FOR THE STEMI PATIENT

**GOAL:** To improve patient outcomes and decrease the morbidity/mortality of cardiac related emergencies by adherence to evidence based & best practices: pre-hospital recognition, code STEMI activation, rapid transport, treatment initiation and delivery to definitive care.

#### DECISION CRITERIA

##### **TRANSPORT TO THE CLOSEST HOSPITAL FOR STABILIZATION when:**

- CPR Is In Progress.
- Unable To Secure An Airway.
- The Patient's Condition Is Rapidly Deteriorating & Help Is **Not** en Route.
- EMS Personnel/Provider Are Unable To Provide ACLS Care.
- Leaving The Service Area Would Leave The Community Without An Ambulance.

##### **TRANSPORT TO CLOSEST IV FIBRINOLYTIC THERAPY CAPABLE FACILITY when there is a suspected >90-**

##### **Minute Delay From FMC to Primary PCI to achieve mechanical reperfusion.**

---In the absence of contraindications and when PCI is not available, fibrinolytic therapy is reasonable for patients with STEMI if there is clinical and/or ECG evidence of ongoing

ischemia within 12 to 24 hours of symptom onset and a large area of myocardium at risk or hemodynamic instability.

##### **Absolute Exclusion Criteria for Fibrinolytic Therapy:**

- Previous history of IntraCranial Hemorrhage
- Known structural cerebral vascular lesion (e.g., arteriovenous malformation)
- History of ischemic stroke within 3 months
- EXCEPT acute ischemic stroke within 4.5 h
- Head trauma or brain surgery within 6 months
- Known malignant intracranial neoplasm (primary or metastatic)
- Suspected aortic dissection
- Active bleeding or bleeding diathesis (excluding menses)
- Significant closed-head or facial trauma within 3 months
- Intracranial or intraspinal surgery within 2 months
- Severe uncontrolled hypertension (unresponsive to emergency therapy)
- For streptokinase, prior treatment within the previous 6 months

**TRANSPORT TO PCI ACCREDITED OR CHEST PAIN ACCREDITED HOSPITAL when there is a suspected <90**

**Minute Delay From FMC to Primary PCI to achieve mechanical perfusion and:**

- Chest pain or squeezing, fullness, and/or discomfort in the center or left side of the chest that lasts for more than a few minutes or that goes away and comes back. Feeling weak, light-headed, or faint. You may also break out into a cold sweat. Pain or discomfort in the jaw, neck, back, one or both arms or shoulders. Shortness of breath.
- ST elevation at the J point in at least 2 contiguous leads of 2 mm (0.2 mV) in men or 1.5 mm (0.15 mV) in women in leads V2–V3 and/or of 1 mm (0.1 mV) in other contiguous chest leads or the limb leads (7). The majority of patients will evolve ECG evidence of Q-wave infarction. New or presumably new LBBB has been considered a STEMI equivalent.
- EMS transport directly to a PCI-capable hospital for primary PCI is the recommended triage strategy for patients with STEMI, with an ideal FMC-to-device time system goal of 90 minutes or less\*
- Immediate transfer to a PCI-capable hospital for primary PCI is the recommended triage strategy for patients with STEMI who initially arrive at or are transported to a non-PCI-capable hospital, with an FMC-to-device time system goal of 120 minutes or less\*
- In the absence of contraindications, fibrinolytic therapy should be administered to patients with STEMI at non-PCI-capable hospitals when the anticipated FMC-to-device time at a PCIcapable hospital exceeds 120 minutes because of unavoidable delays.
- When fibrinolytic therapy is indicated or chosen as the primary reperfusion strategy, it should be administered within 30 minutes of hospital arrival\*
- See attached algorithm-

**IN ADDITION:**

- Contact Medical Control As Needed
- Transmit/Call 12 -Lead EKG to Receiving Facility for Physician Interpretation and Treatment Plan via PULSARA or other transmission capability.
- Secure Texas Wristband.

**Relevant Citations:**

Blankinship, K. & Anderson, C. (2017). AHA/ACC Clinical Performance and Quality Measures for Adults with ST-Elevation and Non-ST-Elevation Myocardial Infarction: PM-7. American College of Cardiology Foundation. Updated 5.18.2021.

Center for Disease Control and Prevention. (2021). Heart Attack Symptoms, Risk, and Recovery. Retrieved from [https://www.cdc.gov/heartdisease/heart\\_attack.htm](https://www.cdc.gov/heartdisease/heart_attack.htm)

O'Gara et al. (2013).ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction. *Journal of the American College of Cardiology*. Elsevier. Vol. 61,(4).