Statewide EMS STEMI/ACS Guidelines

State Heart Attack Advisory Council

ACS Signs and Symptoms:

Chest pain
Shortness of Breath
Palpitations, Frequent PVC's
Bradycardia, Tachycardia
Lightheadedness, Dizziness
Syncope, Diaphoresis
Severe Weakness or Fatigue in pts >45 years
Heartburn, Nausea, Vomiting
Unexplained Altered Level of Consciousness, Confusion

12-Lead ECG Criteria:

Obtain a 12-lead ECG on patients experiencing ANY of the ACS Signs and Symptoms.
Obtain a 12-lead ECG on ANY diabetic patient
Any woman with pain from nose to navel, obtain a 12-lead ECG!
If you believe patient might be experiencing a cardiovascular event, obtain a 12-lead ECG!
Any patient experiencing impending doom.

STEMI Criteria:

ST elevation >1mm (0.1mV) in at least 2 contiguous leads (V1-V6) or at least 2 adjacent limb leads.
ECG demonstrates new Left Bundle Branch Block (LBBB)
If initial urgent (< 10 min) ECG is not diagnostic, but suspicion is high for STEMI, obtain serial ECGs at 5–10-minute intervals. **Please leave the stickers in place for increased accuracy on comparison.**

WHEN INDOUBT, ACTIVATE!

Interventions:

Obtain vital signs.

Place patient Semi Fowlers, Supine if BP<90 Systolic.

Obtain 12-Lead ECG upon arrival to patient's side.

Consider placing hands free defibrillator pads.

Oxygen if saturation is <90%. **(Goal is >95%).**

Aspirin 81mg x 4 or 324mg x1, chewed. DO NOT give if patient has an allergy or current/recent GI bleed. If medication wasn't given, document reason why.

IV with saline in upper extremity, avoid distal of forearm if possible. If right sided involvement suspected, give 500mL bolus.

Place second IV, saline locked as time permits, in route.

Consider NTG 0.4mg SL q 5min for a total of 3. DO NOT give is B/P <90mmHG systolic, HR <60bpm or has used Viagra/PDE inhibitors ≤ 48 hours. Nitrates in inferior MI can cause profound hypotension. IV bolus of NS may help. Accept mild bradycardia as another common finding of acute inferior MI.

Consider narcotic analgesia for pain management per local EMS protocols.

Consider giving: heparin 5,000 units IV/IO AND Lopressor 5mg IV/IO (max 2).

Confirmed STEMI should go to PCI-capable facility.

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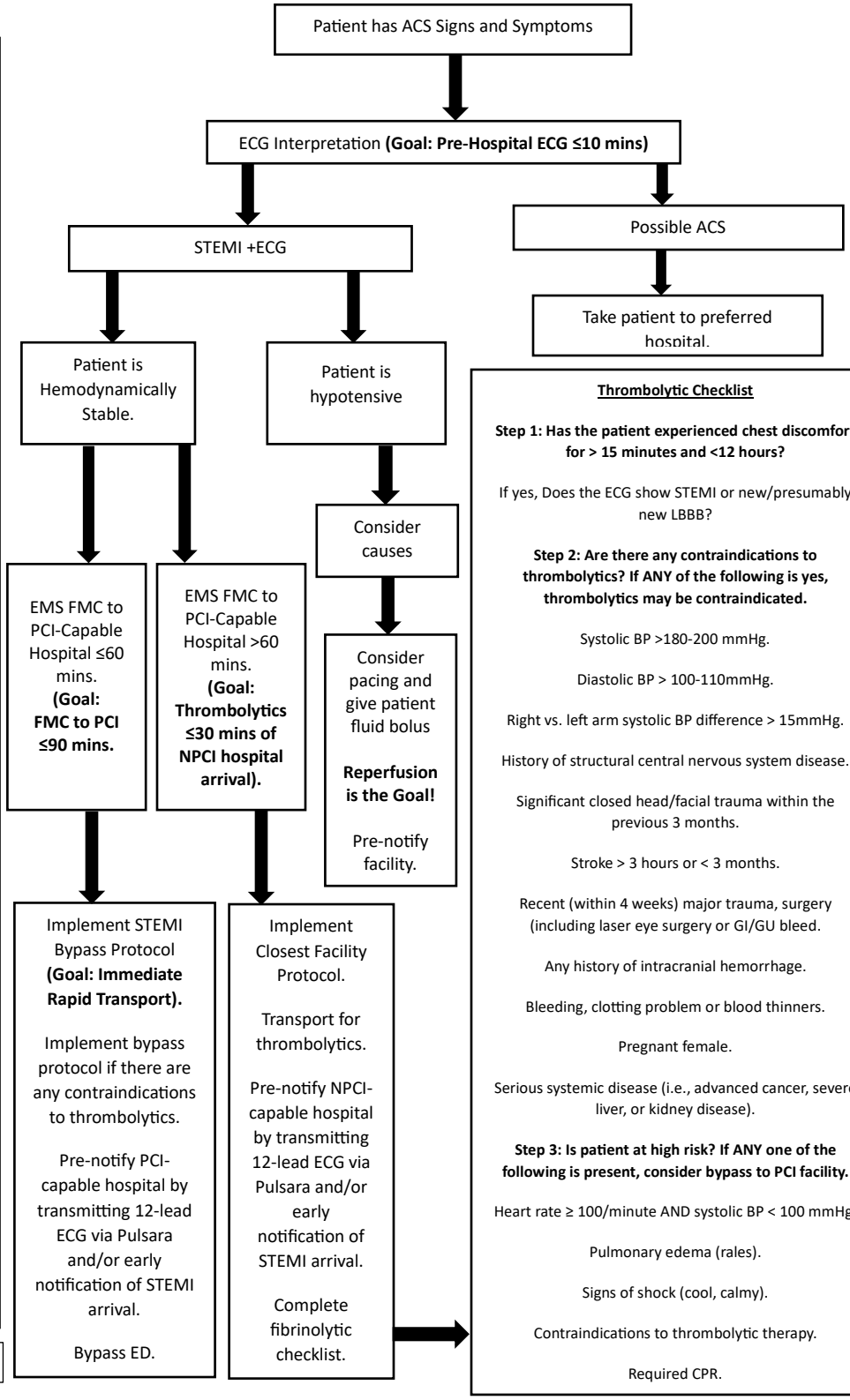

Thrombolytic Checklist

Step 1: Has the patient experienced chest discomfort for > 15 minutes and <12 hours?

If yes, Does the ECG show STEMI or new/presumably new LBBB?

Step 2: Are there any contraindications to thrombolytics? If ANY of the following is yes, thrombolytics may be contraindicated.

Systolic BP >180-200 mmHg.

Diastolic BP > 100-110mmHg.

Right vs. left arm systolic BP difference > 15mmHg.

History of structural central nervous system disease.

Significant closed head/facial trauma within the previous 3 months.

Stroke > 3 hours or < 3 months.

Recent (within 4 weeks) major trauma, surgery (including laser eye surgery or GI/GU bleed.

Any history of intracranial hemorrhage.

Bleeding, clotting problem or blood thinners.

Pregnant female.

Serious systemic disease (i.e., advanced cancer, severe liver, or kidney disease).

Step 3: Is patient at high risk? If ANY one of the following is present, consider bypass to PCI facility.

Heart rate ≥ 100/minute AND systolic BP < 100 mmHg.

Pulmonary edema (rales).

Signs of shock (cool, calmy).

Contraindications to thrombolytic therapy.

Required CPR.

Focused Efforts:

Reduce ECG Time **(Goal: FMC to ECG ≤10 mins).** If ECG times are not occurring ≤ 10 minutes, take cardiac monitor with you to the patient's side. DO NOT delay obtaining an ECG by leaving it on the ambulance.

Reduce On-Scene Time **(Goal: <10-15 mins MAX).**

Activate via Pulsara.

Once STEMI is Identified: Rapid Transfer Decision.

Transmit ECG Through Pulsara to Activate Hospital STEMI Team.

Determine Hospital Pathway: If patient is hemodynamically stable, go to nearest PCI-capable hospital. If unstable, after appropriate protocol and care is provided, stop at nearest NPCI-capable hospital to stabilize.

Please consider that for EMS providing interfacility transport, it may be beneficial for EMS to remain at the initial hospital until transfer to a STEMI receiving center during patient stabilization. This approach can help minimize DIDO times. If this is not feasible at your location, please prioritize early notification of impending transfers to improve utilization.

Consider requesting an aircraft upon dispatch for extended transport times. **DO NOT DELAY** transport for aircraft. Consider rendezvous in route.