



**Cardiovascular  
ACUTE CORONARY SYNDROME  
Practice Guideline**

**Patient Care Goals**

1. Identify STEMI quickly
2. Determine the time of symptom onset
3. Activate hospital-based STEMI system of care
4. Monitor vital signs and cardiac rhythm and be prepared to provide CPR and defibrillation if needed
5. Administer appropriate medications to reduce pain to zero
6. Transport to appropriate facility

**Patient Presentation:**  
Inclusion Criteria

1. Acute coronary syndrome symptoms, including chest pain, nausea, vomiting, dyspnea, diaphoresis, non-traumatic back or epigastric pain, especially in women, the elderly, or patients with previous cardiac history, diabetes, renal failure/dialysis, stimulant drug use. May also present with CHF, syncope and/or shock.
2. 12 Lead ECG meets STEMI criteria (STEMI Guide p.2)

**Patient Management:**  
Inferior Wall STEMI

- Avoid the use of nitroglycerin
- Consider a fluid bolus

Nitroglycerin 0.4mg SL, can repeat q5 minutes as long as SBP greater than 100mmHg

- Avoid in patients with phosphodiesterase inhibitor use within the past 48 hours
- Avoid in patients with inferior wall STEMI, RV STEMI, heart rate greater than 120 in the absence of heart failure. or bradycardia <50.

Fentanyl 0.5 to 1mcg/kg IN, IV, IO, IM, can repeat q10 minutes

- Maximum cumulative dose of 300mcg over duration of transport if needed

**Patient Safety Considerations:**

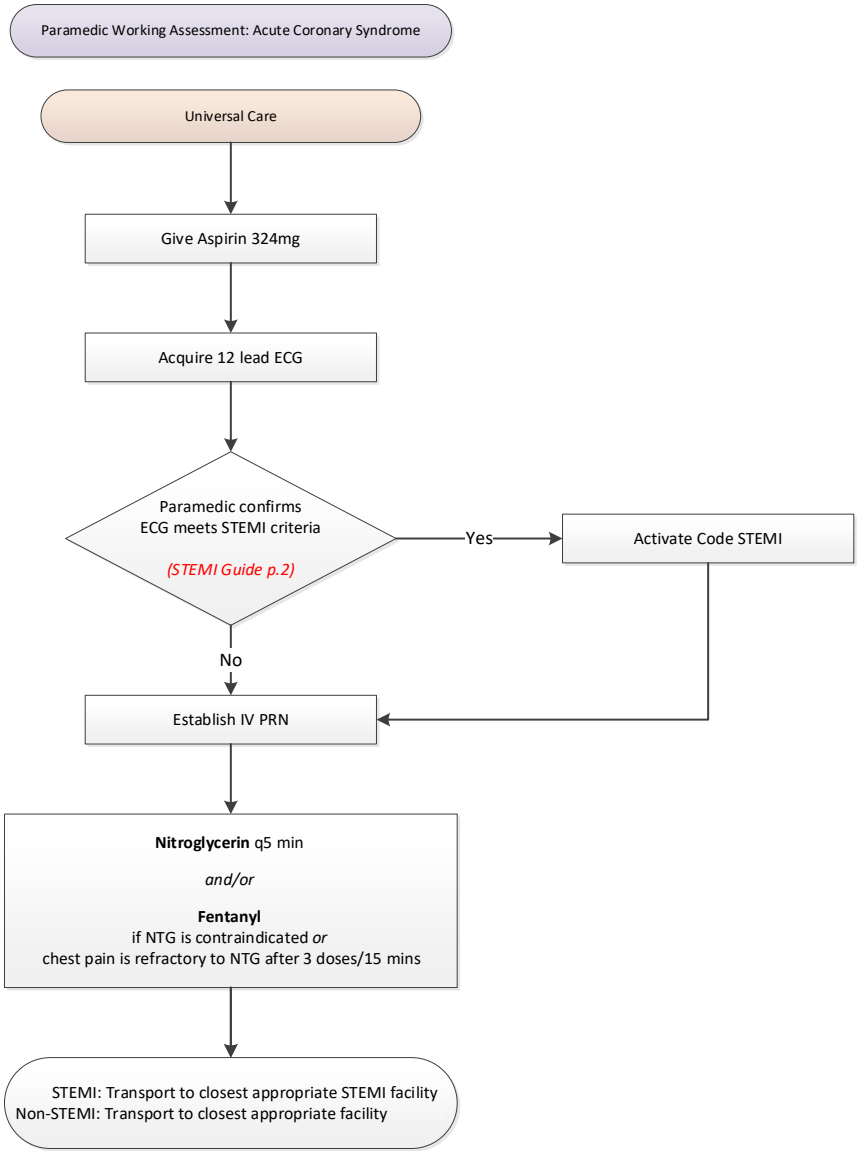
1. Observe for signs of clinical deterioration: dysrhythmias, CP, SOB, decreased LOC/syncope, or other signs of shock/hypotension
2. Perform serial 12-lead EKGs PRN for symptom changes
3. Age, gender, patient initials mandatory on all ECGs

**Quality Improvement:**  
Key Documentation Elements

1. Time of symptom onset
2. Time of patient contact by EMS to time of 12-lead acquisition
3. Time of ASA administered, or reason why not given
4. Time of STEMI notification
5. Pain medication given
6. Document 12 lead as event/procedure with acquisition time.

**Performance Measures**

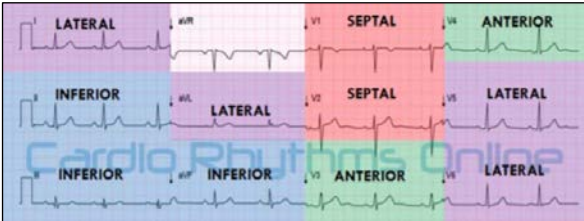
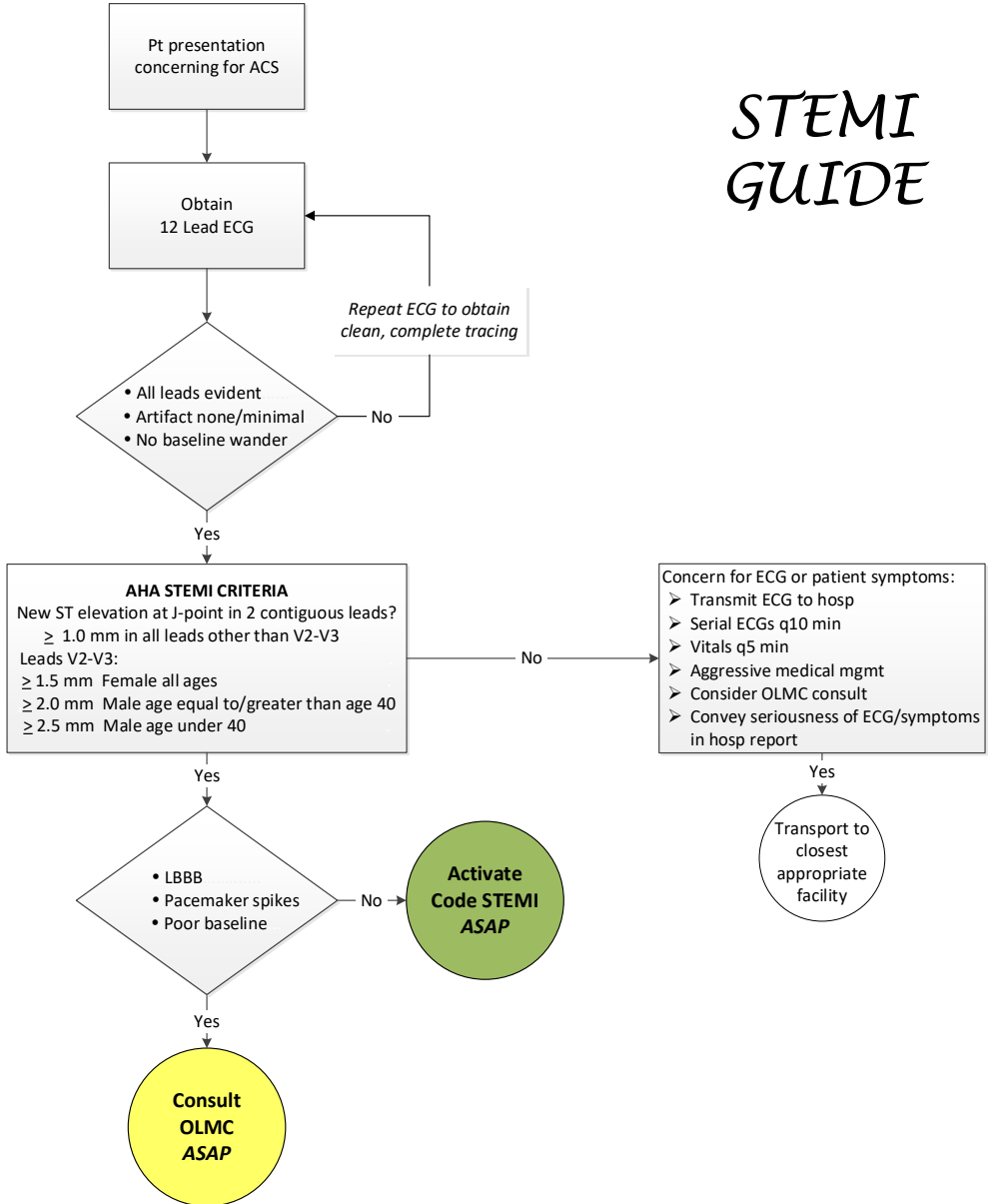
1. FMC to first diagnostic 12-lead within 10 minutes
2. First diagnostic 12-lead to STEMI notification within 10 minutes
3. Confirmation patient received aspirin (taken prior to EMS arrival, given by EMS, or substantiated by other pertinent negatives)
4. Patient given pain medication
5. Scene less than 15 minutes
6. FMC to hospital arrival within 30 minutes





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**STEMI**  
**GUIDE**



**ST Elevation in 2 or more contiguous leads:**

Leads II, III, aVF	Inferior wall MI	vessel likely RCA or LCx
Leads I, aVL, V5, V6	Lateral wall MI	vessel likely LCx or LAD branch
Leads V1, V2, V3, V4	Septal/Anterior wall MI	vessel likely LAD

ST depression may be present in reciprocal leads (opposite wall)