ED Evaluation

- History or examination concerning for STEMI

- Vital signs with continuous cardiac monitoring
- EKG with goal door-to-EKG time <10 min.
- Chest X-ray
- Lab Work (not required for treatment)
  1. CBC
  2. BMP
  3. Troponin

Diagnose STEMI

- Two peripheral IVs
- Aspirin 324 mg PO or 300 mg PR
- UFH with bolus of 60 U/kg (maximum of 4000 U) followed by 12 U/kg/hr (maximum of 1000 U/hr)
- Supplemental O2 if SaO2 <90%
- Consider opioid analgesia for pain*
  - Morphine 0.1 mg/kg IV, redose at 0.05 mg/kg Q10M
  - Fentanyl 0.5-1 μg/kg IV, redose at 0.5 μg/kg Q10M
- Consider IV nitroglycerin 10 μg/min for hypertension
  - Titrate to desired blood pressure
  - Recommend against routine use of sublingual nitroglycerin
  - May consider GTN 0.4 mg SL for refractory anginal pain

PCI-capable facility

- Activate Cath Lab (Goal door-to-balloon <90 minutes)
- Ticagrelor 180 mg PO load OR Clopidogrel 600mg PO load

Definitive care

- Transfer to PCI-capable facility

Non-PCI-capable facility

- Presentation-to-balloon time <120 minutes?

  - YES
  - Contraindications to fibrinolytic therapy?

    - NO
      - Fibrinolysis Preferred (Goal door-to-needle <30 minutes)
      - Tenecteplase IV push
        - 30 mg for <60 kg
        - 35 mg for 60-70 kg
        - 40 mg for 70-80 kg
        - 45 mg for 80-90 kg
        - 50 mg for >90 kg
      - Clopidogrel 300 mg PO load
        - Decrease dose to 75mg PO for age >75

    - NO
      - PCI preferred

*Hold for:
1. Bradycardia <60
2. SBP <90 mmHg
3. Respiratory depression

†Fibrinolytic contraindications:
1. Prior ICH
2. Known cerebral vascular malformation
3. Ischemic stroke <3 months prior
4. Known intracranial malignancy
5. Bleeding diasthesis
6. Intracranial/spinal surgery <2 months prior
7. Suspected aortic dissection
8. Severe uncontrolled HTN
9. Head or facial trauma <2 months prior
10. Persistent ischemic symptoms >12 hours