

# Cardiac Emergencies - Triage/Transfer Process

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**Note:** For emergencies occurring on MD Anderson campus locations not supported by the Code Blue Team, contact 911 ([Code Blue Team vs. 911 Response Map](#))

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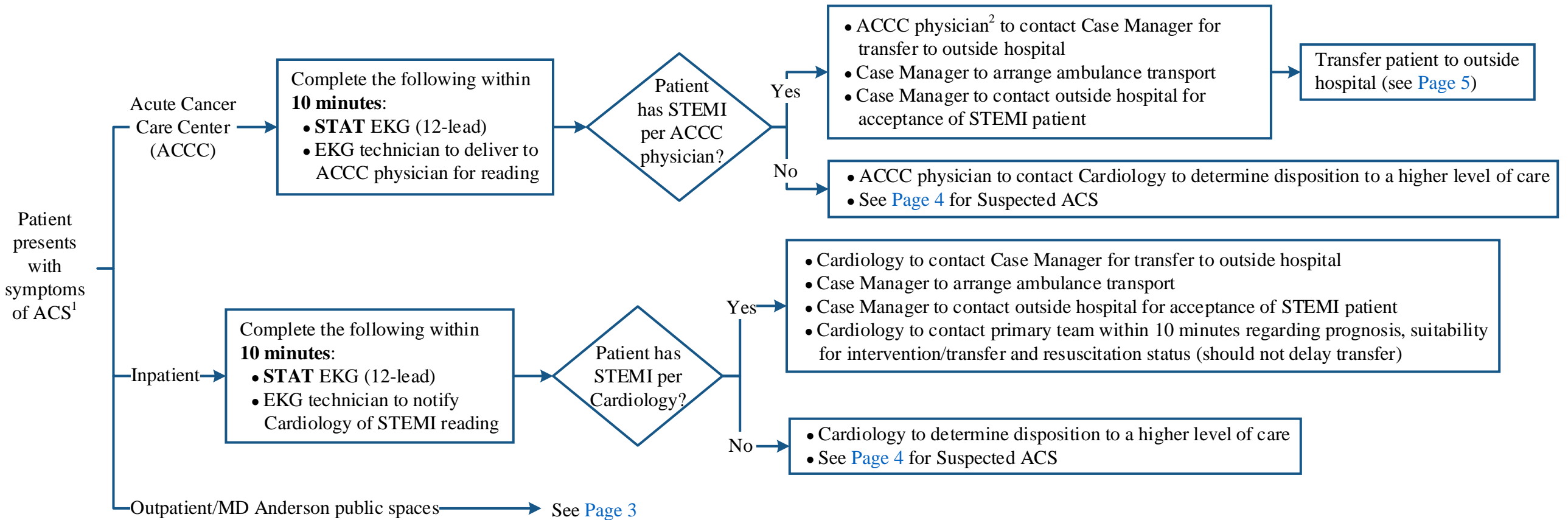
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## PRESENTATION AND ASSESSMENT

## DISPOSITION

**Note:** Patient should be transferred < 30 minutes of initial presentation [door in-door out (DIDO)] since the “door to device time” for STEMI is < 120 minutes



ACS = acute coronary syndrome  
 STEMI = ST-elevation myocardial infarction

- <sup>1</sup> ACS symptoms:
- Chest pain or discomfort
  - Shortness of breath
  - Pain or discomfort in one or both arms, jaw, neck, back, or stomach
  - Dizziness or lightheadedness
  - Nausea
  - Diaphoresis

<sup>2</sup> ACCC physician to perform the following only if able to complete within 10 minutes; DO NOT DELAY TRANSFER

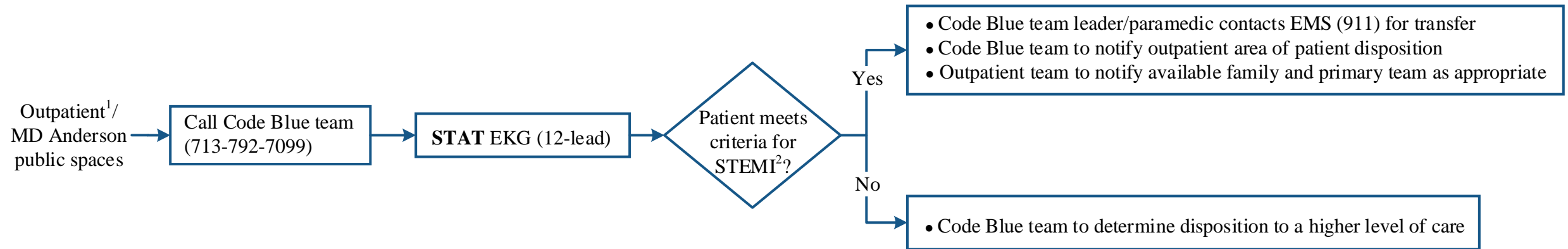
- Initiate medical management:
  - Aspirin 162-325 mg PO once
  - P2Y12 inhibitor loading dose: Clopidogrel 600 mg PO once **or** Ticagrelor 180 mg PO once
  - Anticoagulation-unfractionated heparin (UFH) with additional boluses if needed to maintain therapeutic activated clotting time (ACT)
- Contact Cardiology for confirmation of STEMI
- Contact primary team regarding prognosis, suitability for intervention/transfer and resuscitation status

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## PRESENTATION AND ASSESSMENT

## DISPOSITION

**Note:** Patient should be transferred < **30 minutes** of initial presentation [door in-door out (DIDO)] since the “door to device time” for **STEMI** is < **120 minutes**



EMS = Emergency Medical Services  
 STEMI = ST-elevation myocardial infarction

<sup>1</sup> For outpatient areas not covered by Code Blue services, call 911 and provide supportive care until EMS arrives

<sup>2</sup> Criteria for STEMI

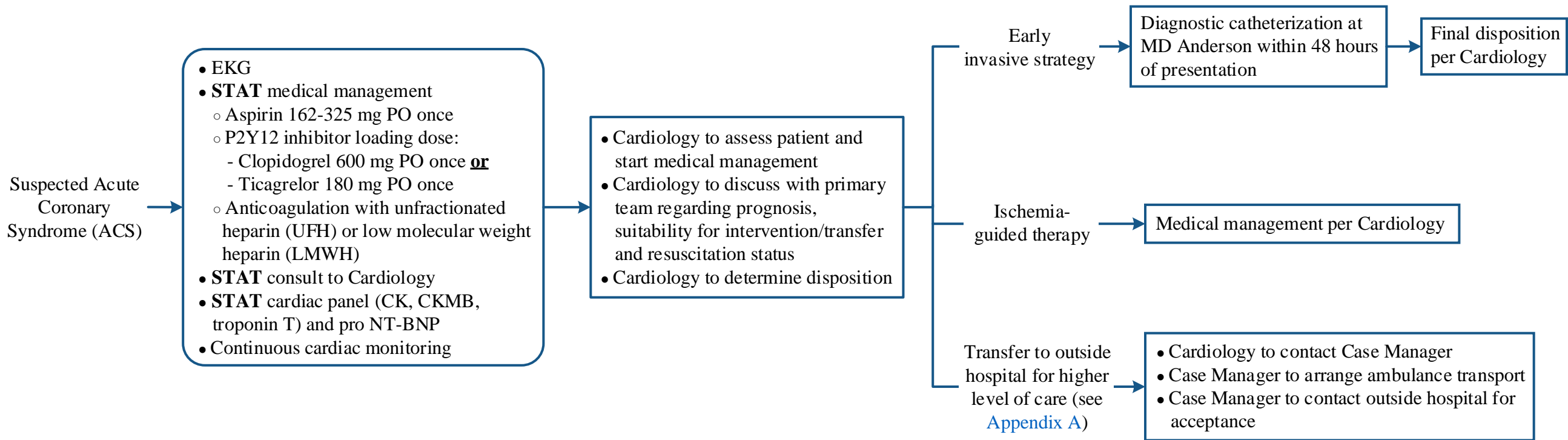
- New ST elevation at the J point in two contiguous leads of > 0.1 mV in all leads other than leads V2-V3
- For leads V2-V3 the following cut points apply:
  - Men ≥ 40 years old: ≥ 0.2 mV
  - Men < 40 years old: ≥ 0.25mV
  - Women regardless of age: ≥ 0.15 mV
- New or presumed new left bundle branch block (LBBB)

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## PRESENTATION AND ASSESSMENT

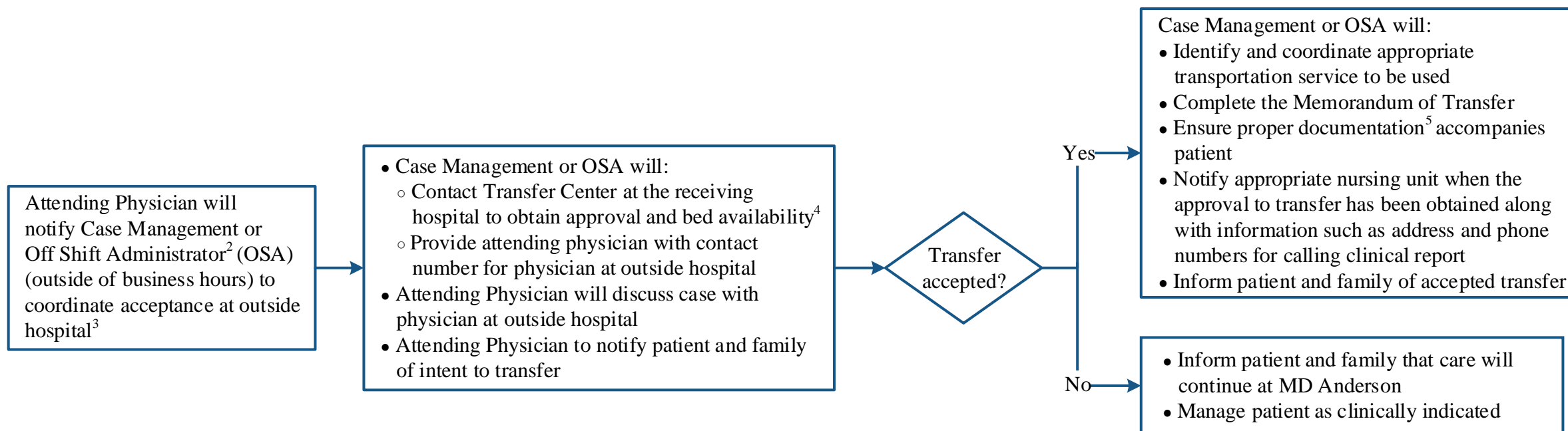
## DISPOSITION



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## EMERGENCY TRANSFER ADMINISTRATIVE PROCESS<sup>1</sup>

## DISPOSITION



<sup>1</sup> If patient is not stabilized prior to transferring to another facility, continue to pursue a transfer if the individual requests the transfer **or** the expected benefits outweigh the increased risks of the transfer (see MD Anderson Institutional Policy #CLN3280 - Emergency Medical Screening Examination Stabilization, and Appropriate Transfers Policy)

<sup>2</sup> Contact Case Management or OSA via operator

<sup>3</sup> Refer to MD Anderson Institutional Transfer Policy (#CLN0614)

<sup>4</sup> Discuss with Attending Physician regarding preference for receiving hospital based on clinical scenario. See [Appendix B: Texas Medical Center \(TMC\) Hospital Contact Information](#). If transfer approval is not promptly obtained, Case Management to contact alternate hospitals to avoid delay.

<sup>5</sup> Documentation:

- “Face sheet”
- Medical records to include a current reconciled medication list and transfer orders per primary care team
- Others as appropriate

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## APPENDIX A: TIMI (Thrombolysis in Myocardial Infarction) Score

### **TIMI score calculation (1 point for each):**

- Age greater than or equal to 65 years old
- Aspirin use in the last 7 days (patient experiences chest pain despite aspirin use in past 7 days)
- At least 2 angina episodes within the last 24 hours
- ST changes of at least 0.5 mm in contiguous leads
- Elevated serum cardiac biomarkers
- Known coronary artery disease (CAD) (coronary stenosis greater than or equal to 50%)
- At least 3 risk factors for CAD, such as:
  - Hypertension greater than 140/90 mmHg or on anti-hypertensives
  - Current cigarette smoker
  - Low HDL cholesterol (less than 40 mg/dL)
  - Diabetes mellitus
  - Family history of premature CAD:
    - Male first-degree relative or father younger than 55 years old
    - Female first-degree relative or mother younger than 65 years old

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## APPENDIX B: Texas Medical Center (TMC) Hospital Contact Information

	Memorial Hermann TMC	CHI St. Luke's TMC	Methodist TMC
<b>For Transfers:</b>	Transfer Center (713) 704-2500	Transfer Center (832) 355-2233	Transfer Center (713) 441-6804

### Additional contacts:

	Memorial Hermann TMC	CHI St. Luke's TMC	Methodist TMC
ACS/STEMI	Fax EKG to (713) 704-0665 (for ACCC patients)	On-call STEMI fellow via page operator (832) 355-4146 On-call STEMI attending via transfer center (888) 875-1434 Catheterization Lab (832) 355-6650 Dr. George Younis (Catheterization Lab Med Director) (832) 816-7324	On-call STEMI attending via page operator (713) 790-2201 Catheterization Lab (713) 441-5292

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## SUGGESTED READINGS

Jneid, L., Addison, C., Bhatt, L., Fonarow, A., Gokak, A., Grady, M., . . . Pancholy, J. (2017). 2017 AHA/ACC Clinical performance and quality measures for adults with ST-elevation and non-ST-elevation myocardial infarction: A report of the American College of Cardiology/American Heart Association task force on performance measures. *Circulation: Cardiovascular Quality and Outcomes*, 10(10), e000032. <https://doi.org/10.1161/HCQ.0000000000000032>

MD Anderson Institutional Policy #CLN0614 – Transfer of Patients to, from and Within MD Anderson Cancer Center Policy

MD Anderson Institutional Policy #CLN3280 – Emergency Medical Screening Examination Stabilization, and Appropriate Transfers Policy



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## DEVELOPMENT CREDITS

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