# CPEC Decision Support Tool

## Exclusion Criteria

- Prior CAD (MI, coronary artery bypass graft (CABG)surgery, coronary stents)
- Positive Biomarkers (Troponin or CK-MB)
- ECG suggestive of ischemia (ST elevation or depression)
  - Bundle block and nonspecific changes may be suitable
- Suspect other acute non-coronary diagnosis (Pulmonary embolus, pneumonia, heart failure, acute drug use)
- Pregnancy

## Chest Pain Assessment

- Location: substernal / jaw / left arm
- Onset with exertion or stress
- Relief with rest or nitroglycerin

___ of 3 above present

0 or 1 = Nonanginal
2 = Atypical
3 = Typical

## Risk Factor Assessment

- Diabetes
- Hypertension
- Hyperlipidemia
- Family History (men < 55, women < 65)
- Tobacco Use
- Peripheral Arterial Disease or stroke

___ of risk factors present

## Likelihood of Coronary Artery Disease

### Low
- Nonanginal Pain
- Age < 40 years
- 0 or 1 Risk Factors

- Exercise Treadmill Test

### Intermediate
- Atypical Pain
- Age 40-60
- 2 or 3 Risk Factors

- Exercise Treadmill Test
- Cardiac CT Angiography

### High
- Typical Pain
- Age > 60 years
- Over 3 Risk Factors

- Consult/Admit

## Contraindications for Testing

### Exercise Treadmill Test
- Unable to ambulate
- Uninterpretable ECG
  (Bundle block, pacemaker, LVH)

### Cardiac CT Angiography
- Contrast Allergy (anaphylaxis or swelling)
- Arrhythmia
- Prior stent or CABG

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**References:**
## CAD Testing Suggested Management

<table>
<thead>
<tr>
<th>Noninvasive testing, repeat biomarkers, and repeat ECG completed</th>
<th>Inconclusive Test</th>
<th>Ischemia on ETT OR Obstructive CAD on CTA OR Patients with positive biomarkers or ECG suggestive of ACS</th>
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</thead>
<tbody>
<tr>
<td><strong>Biomarkers Negative AND No ischemia OR nonobstructive CAD</strong>*</td>
<td>-Inconclusive ETT includes inadequate stress (&lt; 85% predicted max HR) or uninterpretable results: consider escalated testing with Cardiac CT</td>
<td>- Admit to Cardiology (MCI)</td>
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<tr>
<td>- Discharge to home</td>
<td>-Inconclusive Cardiac CTA includes motion artifact, poor images due to body habitus, or problems with contrast: consider Nuclear Stress, Stress Echo, or Cardiology Consultation</td>
<td>Contact Shands senior Interventional Fellow with all admissions</td>
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<tr>
<td>- Patient Education on Chest Pain, what testing was done and prognosis of test</td>
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<td>For admissions after 7 PM, wait until 7AM the following day to contact the interventional fellow</td>
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<td>*Patient with positive coronary calcium or nonobstructive CAD should be referred to primary care physician with summary of findings for follow-up within 1-2 weeks</td>
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### Reminders:

- From 8A to 5P, Cardiac CTA and Treadmill ECG test interpretations will be provided within 90 minutes
- Preliminary reads of Cardiac CTA will be provided after 5pm including calcium score. Patients may be discharged and all Cardiac CTA results will be tracked by CPEC Directors.
- Calcium score alone is not suitable for decisions regarding admission/discharge, please account for all laboratory values, ECGs, imaging studies, and patient re-evaluation prior to decision on disposition.