The following risk stratification should be considered for patients who present with a chief complaint and/or history concerning for an acute coronary syndrome:

**High Risk-STEMI or Known New LBBB**
*Consider need for emergent PCI/thrombolytics*
*Requires admission-likely CCU*

**High Risk-Unstable Angina/NSTEMI**
*CCU or CCA (Stepdown) Admission*

- New or dynamic EKG changes
  - ST depression 1 mm in 2 contiguous leads
  - T-wave inversion in 2 contiguous leads
- Return of symptoms with known CAD >50%
- Positive biomarkers (Troponin ≥ 1.0 or > 0.4 with concerning clinical picture)
- Rales above base of lungs
- Systolic BP< 100 mm Hg
- Known unstable ischemic heart disease

**Intermediate Risk**
*Will need admission to a tele bed regardless of the availability of provocative testing*

- No high risk features
- AND any of the following
  - Age > 65
  - LBBB not known to be old and not deemed PCI candidate
  - Pathologic Q’s
  - Wellen’s Syndrome
  - Troponins 0.1 – 1.0
  - Known Coronary Stenosis > 50%
  - Accelerating Anginal symptoms
  - Prior history of CAD, abnormal stress test, PCI, or CABG
  - Prior history of Diabetes > 10 years
• Prior history of PVD, ESRD, or CVA
• Needs work-up for other high risk etiologies

**Low Risk**

*If provocative testing available, can be discharged after testing as per cardiology evaluation; otherwise admitted to tele*

- No intermediate or High Risk Features and
- Normal or non-diagnostic EKG
- **and any of the following:**
  - 3 or more traditional risk factors
  - Diabetes < 10 years
  - Known coronary stenosis < 50%
  - ASA use in the past week
  - Lupus
  - HIV
  - Unreliable for follow-up
  - Suspected accelerated atherosclerosis (i.e. nationality, etc.)

**Very low risk**

*Can be discharged if f/u within 48 hours for evaluation/provocative testing*

- No high, intermediate, or low risk features

**Chest Pain deemed Non-ACS**

*Follow-up or Admission to appropriate clinic or service*
**Enzymes**

0 hour CK, CK-Mb, Troponin

Two hour CK, CK-Mb, Troponin if patient high/intermediate risk or low-risk undergoing provocative testing
Compare Mb to original, if Mb>1.5 from original or enzymes positive admit

Six hour CK, CK-Mb, Troponin in all patients still in the ED.
Compare Mb to original, if Mb>1.5 from original or enzymes positive admit

Note: If patient has had >12 hours of continuous, unchanging pain, the second set of cardiac enzymes is unnecessary

**EKG**

EKG at arrival

EKG in 30 minutes if patient still in pain or at attending request

EKG at 6 hours if patient still in the ED

**Radiology**

Chest X-ray

**Provocative Testing**

Exercise EKG
Stress Echo
Nuclear Testing
CTCA
References

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2 Jama 2002;288(3)
5 Heart 2005;91(3):388
7 NEJM 2003;Nov 20 349
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10 Am J EM 2001;19:2