

BROWN EMERGENCY MEDICINE CDU  
CHEST PAIN DIAGNOSTIC PATHWAY

Purpose: To efficiently and accurately triage/risk stratify patients presenting to the ED with chest pain and normal or non-ischemic ECGs. These patients represent a population with low to intermediate likelihood of coronary artery disease (CAD) and low risk for an acute coronary syndrome (ACS).

Suggested Early Discharge Criteria (Patients with all of the following low risk criteria should strongly be considered for discharge from the Emergency Department):

- HEART Score  $\leq 3$
- No ischemic ECG changes
- Normal 0 and 3 hour troponin
- Chest pain free

Admission Eligibility Criteria (One of the following and all low risk criteria):

- Patients with recent chest pain who are now chest pain free
- Patients with discomfort thought to represent an anginal equivalent as a major symptom.
- Patients with chest discomfort as major symptom and a recent cocaine abuse.
- Patients with known coronary artery disease with atypical pain
- HEART Score  $< 7$

- and -

1. Normal or non-diagnostic 12 lead ECG
2. Troponin I  $< 0.18$
3. Age 40 - 80 yrs.

Exclusion Criteria:

- Vital Signs:
  - Temperature  $> 100.4^{\circ}\text{F}$
  - Heart Rate  $> 100$  or symptomatic bradycardia (HR  $< 60$ )
  - Systolic Blood Pressure  $< 100$  mmHg or BP  $\geq 180/100$  on 2 consecutive readings
  - Pulse Oximetry  $< 93\%$
- Acute Comorbidities (requiring hospitalization or active management)
- Oxygen dependent COPD with a new oxygen requirement OR inability to exercise
- New left bundle branch block or cardiac arrhythmia (eg. atrial fibrillation)
- Weight  $> 350$  lbs
- Inability to ambulate or lay recumbent for  $> 30$  minutes
- Any condition found on the "CDU Universal Exclusion Criteria" list

- Requiring more assistance for ADLs than the CDU is capable of safely providing (one assist/patient for units with 5:1 maximum staff:patient ratio and no assists for units with >5:1 maximum staff:patient ratio)
- Unlikely discharge within a 24 hour period (ED attending discretion)

#### CDU Care Update 12/18/2015:

- 3 hour troponin <0.060 -> May undergo stress testing if recommended by cardiology.
- 3 hour troponin 0.061-0.18 -> Continue to manage in CDU for 6 hr troponin and trend. If recurrent chest pain or provider concern, contact ED attending and/or cardiology. No stress testing unless cleared by cardiology.
- If 6 hour troponin still 0.061-0.18 and up-trending -> Hospital admission (if patient already seen by cardiology, contact cardiology first)
- If 6 hour troponin still 0.061-0.18 and down-trending -> disposition per cardiology and ED attending
- Troponin >0.18 at any time during CDU observation -> Contact cardiology for admission (If before 7pm, contact their cardiologist. After 7pm, contact IMIS attending if CVI patient. If private cardiologist, contact them or their coverage 24 hours/day. For ANY cardiology patients admitted after 7pm, call IMIS to inform them of the admission.)

#### Admitting To the Chest Pain CDU Pathway

- From 0700-2300
  - Call the CDU APP to ensure bed availability and give verbal sign out
  - CDU APP will place the CDU orders
- From 2300-0700
  - ED attending is responsible for ensuring CDU bed availability
  - ED attending will place CDU orders (instructions can be found in help juice or in hard copy CDU binder in each team)
- Cardiologist Notification
  - For CVI patients, no cardiologist notification is required for CDU overnight admissions
  - For other cardiologists (CINE, Southcoast, privates, etc.), a call must be placed 24 hours/day to notify the cardiologist that they have a patient being admitted to the TMH CDU that will need to be seen in the morning.