High Risk Features: Presentation with clinical features consistent with an ACS and one or more of the following high risk features.

- Repetitive or prolonged ongoing chest pain or discomfort
- Persistent or dynamic ECG changes of ST segment depression ≥ 0.5mm or new T-wave inversion ≥2mm
- Transient ST-segment elevation in more than two contiguous leads
- Prior percutaneous coronary intervention or prior coronary artery bypass surgery within 6 months
- Left ventricular systolic dysfunction (LVEF <0.40)
- Sustained ventricular tachycardia,
- Haemodynamic compromise (systolic BP< 90mmHg cool peripheries, diaphoresis, Killip class>1, and/or new MR)
- Syncope
- Elevated TnI

Yes to any high risk features for an ACS

Commence on high risk ACS management plan for ACS (NSTEMI/UAP/STEMI)

Intermediate Risk Features: Presentation with clinical features consistent with an ACS and one or more of the following:

- ≥ 2 symptomatic episodes within 24 hours
- Prior regular aspirin use within the last 7 days
- Age ≥ 65
- Chronic Kidney disease – estimated GFR < 60ml/min
- Known Diabetes
- Known CAD – prior MI with LVEF ≥ 0.40, Prior PCI, CABG or coronary lesion more than 50% stenosed
- Two or more * (see definitions) of either
  - Hypertension
  - Family History
  - Active Smoking
  - Dyslipidaemia

Patient is Intermediate risk - consider CPAS or COALA

Assess suitability for admission to the CPAS by referring to the Admission to CPAS criteria.

If suitable for admission, patients will be managed by the CPAS case manager and appropriate testing arranged as determined by local availability. (Ideal is within 72 hrs from discharge)

Tests include:

- MEST
- MPS
- CTCA

If patient is not suitable for CPAS discuss with COALA registrar for possible admission.

Accelerated Protocol:

- Presentation with clinical features consistent with an ACS without intermediate risk or high risk features.

  Once a patient has been assessed as Low-intermediate risk they are suitable for Accelerated protocol:
  - Rpt serial TnI at 2hrs post initial test
  - Serial ECG at 2hrs
  - If serial (0 and 2hr) Troponin are negative and ECG shows no changes:
    - Patient for discharge home with follow up EST, patient and GP information letter.

  If patient has recurrence of symptoms, raised TnI, or develops ECG changes, they need to be reassessed by the COALA Registrar for possible admission.

*DEFINITIONS

Hypertension: Treated or untreated, formally diagnosed by a medical practitioner

Family History: Coronary Heart Disease in first-degree male relative < 55 or first-degree female relative < 65 yrs of age

Active smoking: Any regular/habitual smoking (smear/large quantity) in the last 12 months
If patient is high risk for ACS or has contraindications to Tests refer to Cardiology

### Contraindications for Exercise Stress Testing (EST)

- Unable to/refuses consent
- Known LMCA stenosis (or equivalent)
- HTN >170/110mmHg
- Ongoing symptoms
- LBBB and/or Ventricular pacing
- Pulmonary Embolism suspected
- MI within 2 days
- Inability to cooperate
- CABG within 6 weeks
- Any tachyarrhythmia with uncontrolled ventricular rate
- Decompensated symptomatic HF
- Moderate/Severe stenotic valvular disease
- Physical disability that precludes safe and adequate test performance
- Electrolyte abnormalities - Significant hypokalaemia (<3.0mmol)
- Medical condition that may affect exercise performance (e.g. infection, febrile, dehydration, acute renal failure, thyrotoxicosis)
- Hypotension (systolic <90mmHg)
- PCI within 2 weeks
- 2nd degree or higher AV block
- Active Endocarditis
- Acute myocarditis/pericarditis
- Haemodynamic compromise
- Known Hypertrophic cardiomyopathy

### Relative Contraindications for MPS (Pharmological testing)

**Vasodilators (eg adenosine)**
- Severe bronchospastic airways disease
- Hypotension
- Sick sinus syndrome
- 2 degree or higher AV
- Caffeine (within 12 hours)
- Oral dipyrimadole therapy (within 72 hours)
- Theophylline (within 48 hrs)

**Dobutamine** (LBBB ok)
- On Beta Blocker (stop >24hrs prior)
- Unstable Angina
- Ventricular Arrythmias
- Recent myocardial infarction
- Haemodynamically significant LVOT obstruction
- Known or suspected Aortic dissection

### Relative Contraindications for CTCA through the CPAS

- Irregular heart rate (atrial fibrillation, atrial flutter, frequent ectopy).
- Iodine contrast allergy
- Contraindication to Beta Blocker (severe asthma or 2 degree or higher AV block)
- Severe heart failure
- Severe Aortic Stenosis
- Impaired renal function (GFR <45ml/min/m2)
- Previous PCI or Stenting