Suspected Acute Coronary Syndrome Clinical Pathway

Clinical pathways never replace clinical judgement. Care outlined in this pathway must be altered if not clinically appropriate for the individual patient. Document all variances in patient notes.

POSSIBLE CARDIAC CHEST PAIN and/or OTHER SYMPTOMS of MYOCARDIAL ISCHAEMIA (e.g. diaphoresis, sudden orthopnea, syncope, dyspnea, epigastric discomfort, jaw pain, arm pain)

Consider:
- Atypical Presentations (e.g. diabetes, renal failure, female, elderly or Aboriginal and Torres Strait Islander)

TRIAGE CATEGORY 2
Always consider other critical causes (e.g. aortic dissection, pulmonary embolism)
Do not use this pathway if a non-ACS cause for chest pain can be diagnosed.

ST-ELEVATION OR (presumed new) LBBB

1. Confirm Indications for Reperfusion
   - Chest pain >30 min and <12 hours
   - Persistent ST-elevation ≥1 mm in 2 contiguous limb leads or persistent ST-elevation ≥2 mm in 2 contiguous chest leads or new or presumed new LBBB (Sgarbossa positive)
   - Myocardial infarct likely from history

2. Choose Reperfusion Method
   - Primary PCI
     - Reperefusion possible within 90 mins of first diagnostic ECG immediately contact on-call interventional cardiologist
     - Notify Queensland Ambulance Service for immediate transfer to interventional cardiac facility
   - OR
     - Thrombolyse (if appropriate) within 30 mins of first diagnostic ECG

   Exit this pathway and commence Thrombolysis for STEMI Clinical Pathway

3. Administer Antithrombotic Therapy
   Confirm administration or give:
   - Aspirin 300 mg (soluble)
   - Ticagrelor 180 mg (or alternative if advised by interventional cardiologist)
   - Enoxaparin OR unfractionated heparin (confirm with interventional cardiologist)

   Prepare for urgent transfer* OR Admit to Coronary Care Unit post primary PCI

Accepting Cardiologist
Dr: ........................................ Initial: ........................................

Referral time / date: HH: MM DD / MM / YY

Facility: ..........................................................

Treating Emergency Medical Officer
Dr: ........................................ Initial: ........................................

Signature Log
Every person documenting in this pathway must supply a sample of their initials and signature below

Initials | Signature | Print name | Role
---------|------------|-------------|--------

Page 1 of 2
Suspected Acute Coronary Syndrome Clinical Pathway

Clinical pathways never replace clinical judgement. Care outlined in this pathway must be altered if it is not clinically appropriate for the individual patient. All variances must be clearly documented in the patient's clinical progress notes. Do not use this pathway if a non-Acute Coronary Syndrome (ACS) cause for chest pain can be diagnosed. Manage as per diagnosis.

Presentation with clinical features consistent with suspected Non-ST-Elevation ACS (NSTEACS)

One or more HIGH RISK criteria present:
- **Ongoing** (>10 min) or recurrent chest discomfort despite initial treatment
- Elevated cardiac troponin
- New ischaemic ECG changes of ST-segment depression ≥0.5 mm or new T-wave inversion ≥2 mm or transient ST-segment elevation (≥0.5 mm) in more than two contiguous leads
- Haemodynamic compromise - systolic blood pressure <90 mmHg, cool peripheries, diaphoresis, Killip Class >1, and / or new-onset mitral regurgitation
- Sustained ventricular tachycardia
- Syncope
- Left ventricular systolic dysfunction (left ventricular ejection fraction <0.40), and / or clinical evidence of heart failure
- One or more within the last 6 months:
  - Acute myocardial infarction
  - Percutaneous coronary intervention
  - Coronary artery bypass grafting

HIGH RISK NSTEACS

- Commence ACS pathway
- Continuous cardiac monitoring
- Repeat ECG and troponin at 3 hours for high-sensitivity pathology test OR 6–8 hours for point-of-care test
- Admit to appropriate cardiac monitored unit (e.g. CCU / HDU)
- Immediate / early referral to interventional facility / Cardiologist with view to transfer within 48 hours if clinically stable with no ongoing pain (immediate transfer if clinically unstable)
- Referral time / date: HH : MM DD / MM / YY
- Discussed with: (accepting Cardiologist / Cardiology Registrar)
- Once interventional facility accepts, contact Retrieval Services QLD on 1300 799 127 or Queensland Ambulance Service
- Transfer to another health care facility if required

FURTHER INVESTIGATION

One or more INTERMEDIATE RISK criteria present:
- Age ≥40 years or ≥18 years for ATSI
- Known Coronary Artery Disease (CAD) or previous myocardial infarction

- Regular vital observations
- Repeat ECG and troponin at 3 hours for high-sensitivity pathology test OR 6–8 hours for point-of-care test

Normal results and resolved symptoms:
- Refer patient for early inpatient Exercise Stress Test (EST) (or alternative) OR discharge home and refer for outpatient EST (or alternative) within 7–14 days
- Manage as HIGH RISK if YES to any:
- New ECG changes, repeat cardiac troponin elevated, recurrent chest pain and / or develops other high risk criteria

All LOW RISK criteria present:
- Age <40 years or <18 years for ATSI
- Symptoms atypical for angina
- Absence of CAD
- Remains symptom free
- Normal cardiac troponin
- Normal ECG

Repeat ECG and troponin at 3 hours for high-sensitivity pathology test OR 6–8 hours for point-of-care test

Normal results and resolved symptoms:
- Discharge home for GP follow up. No further objective cardiac testing recommended
- Manage as HIGH RISK if YES to any:
- New ECG changes, repeat cardiac troponin elevated, recurrent chest pain and / or develops other high risk criteria

Repeat same TROPONIN assay test for first (0 hour) and repeat troponin testing

- Point-of-care OR Pathology test
- Time / date collected:
  - First (0 hour): HH : MM DD / MM / YY
  - Second (repeat): HH : MM DD / MM / YY

DISCHARGE HOME:
- Chest pain action plan given to patient
- Investigations plan (if applicable)
- GP follow up for risk factor modification
- Discharge summary / referral letter

* Follow local referral and / or transfer processes
† Does not require continuous cardiac monitoring if troponin negative, ECG normal, and no further chest pain