# Policy/Procedure

## TITLE OF POLICY : Chest Pain Management Policy

**Changes from last version**

- This policy is relevant to all MQ Health departments
- Simplified policy statements
- New 'Management of the patient experiencing chest pain' flowchart
- Oxygen administration is not indicated unless the patient is hypoxic
- Nitrates contraindicated for Systolic Blood pressure <90 mmHg (previously <100mmHg)
- If patient is experiencing severe chest pain/shortness of breath ± sweating and nausea, they will require an ECG and urgent medical review (Code blue) regardless of the duration of the pain.

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### 1. Purpose

This policy provides a guideline to staff for prompt, accurate assessment of chest pain and effective management.

### 2. Background

Chest pain is any pain felt in the chest area and is the most common symptom of myocardial ischeamia. Chest pain can be caused by a number of physiological factors including; cardiac, respiratory, GIT, musculoskeletal and psychological. Chest pain can also be manifested as shoulder, arm, jaw and upper abdominal pain. Other symptoms can include shortness of breath, nausea, vomiting and diaphoresis.

Chest pain assessment is time critical and based on history, assessment (including observations and use of 'PQRST pain assessment tool), 12 lead ECG and serial cardiac biomarkers.

Cardiac chest pain can be caused by angina or acute coronary syndrome (ACS). ACS is a medical emergency. The pain can occur when there is an imbalance between myocardial oxygen supply and demand. Coronary artery disease causes narrowing of the coronary arteries. This narrowing is commonly associated with atherosclerosis, a cholesterol or plaque build up within the arteries. Angina is narrowing of coronary arteries and usually goes away after 5-10mins with rest and antianginals. ACS is a complete cessation of blood often due to plaque rupture within the coronary artery, this

can cause damage to the heart and even death. Chest pain and other symptoms of ACS last longer than 15mins and are NOT relieved by rest or antianginal medication.
A Clinical review must be called for all patients complaining of chest pain. If patient condition deteriorates, chest pain worsens or is not resolved within 10 minutes, a Code blue must be called.

## 3. Policy Statements

- A clinical review must be activated for all episodes of chest pain and medical staff should assess the patient within 10 minutes or as soon as possible after the onset of pain.
- A Code blue must be activated if the patient experiences chest pain lasting longer than 10 minutes and/or, if chest pain is severe or patient deteriorates. Record vital signs every 5 minutes while pain persists.
- The Cardiologist/on call Cardiologist (after hours) should be notified promptly if a patient experiences prolonged ischaemic pain (> 10 mins) or if there is a ST segment elevation following coronary angioplasty or insertion of a coronary stent.
- Unstable patients with ongoing pain and/or ST elevation are to be transferred to Coronary Care Unit (CCU) at the discretion of the Cardiologist.

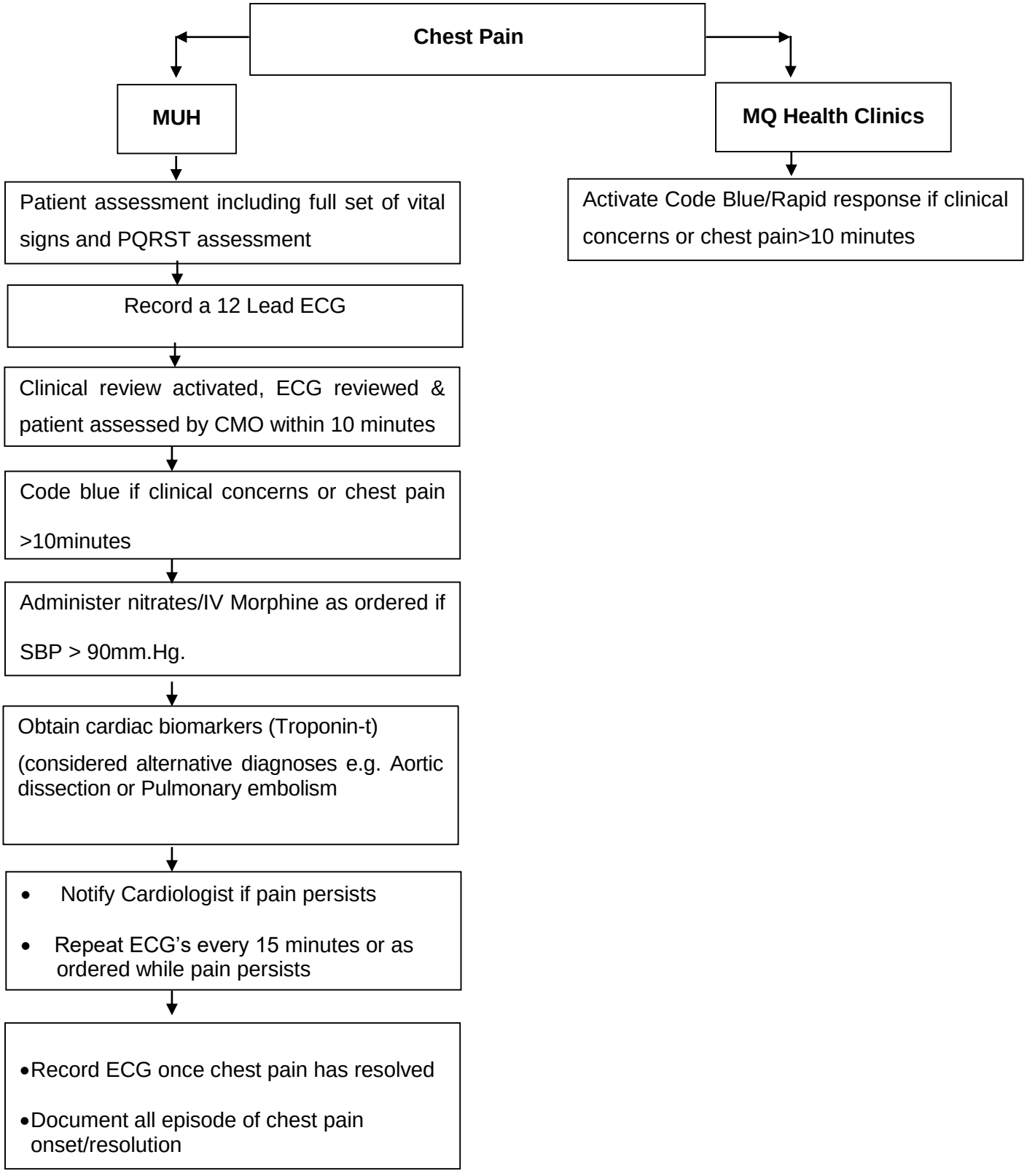
## 4. Procedure

1. Encourage patient to notify staff immediately when pain occurs
   Assess characteristics of pain & severity use the 'PQRST" approach
   **P**: precipitating cause – provoked by exertion, meals, changes in position, anxiety or stress
   **Q**: quality - sharp, dull
   **R**: region/radiation – substernal, epigastric, radiation to arm, neck, jaw back
   **S**: severity – mild, moderate, severe (use pain score 0-10), intermittent, continuous
   **T**: timing – new, chronic, similar to previous pain experienced, duration of pain
2. Perform full sets of observations – Blood pressure, Heart rate, Temperature and Respiratory rate.
3. Routine administration of oxygen is not indicated unless patient is hypoxic (O2 saturations < 93%) or less than 88-92% on patient with Chronic Obstructive Pulmonary Disease (COPD).
4. Perform 12 lead ECG during chest pain.

5. Ensure all ECG's recorded during chest pain are reviewed by a Medical Officer within 10 minutes. Administer antianginal medication/ IV Morphine as ordered (if SBP > 90 mm.Hg.).

6. Ensure cardiac biomarkers are obtained and reviewed as soon as available. Repeat ECG 15 minutely (or more frequently if ordered) while pain and/or ECG changes persist.
7. Perform an ECG following relief of chest pain/pain free to ensure all ischaemic changes have resolved.
8. Assess effectiveness of treatment.
9. Ongoing cardiac monitoring, transfer to CCU, serial 12 lead ECG and serial cardiac biomarkers as per Medical team/ Cardiologist.
10. Document all episodes of chest pain including onset and resolution of pain complaints in the progress note (TrakCare/ Riskman if required).
11. In MQ Health clinics – activate Code Blue/Rapid response if there are any clinical concerns or if chest pain>10 minutes.

***MANAGEMENT OF THE PATIENT EXPERIENCING CHEST PAIN***




**<u>Please note:</u> If a patient is experiencing severe chest pain/shortness of breath <u>+</u> sweating and nausea, they will require an ECG and <u>urgent</u> medical review (Code blue) regardless of the duration of the pain.**

## 5. Relevant Legislation

## 6. References


Agency for Clinical Innovation. (2019). Pathway for Acute Coronary Syndrome Assessment (PACSA). NSW Health GL2019_014. Retrieved from https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2019_014.pdf

Australian Nursing & Midwifery Federation. (2018). Chest pain: Assessment and Management, *ANMJ* 26(3), 30-33. Retrieved from https://issuu.com/australiannursingfederation/docs/anmj___september_2018___issuu

Australian Resuscitation Council. (2016). Guidelines. *Acute Coronary Syndrome: Initial Medical Therapy. Guideline 14.2.*

Australian Resuscitation Council. (2016). Guidelines. *Acute Coronary Syndrome Syndrome: Presentation with ACS. Guideline 14.1.*

Chew, D.P., Scott, I.A., Cullen, L., French, J.K., Briffa, T.G., Tideman, P.A., Woodruffe, S., Kerr, A., Branagan, M & Aylward, P.E.G. (2016). National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian Clinical Guidelines for the Management of Acute Coronary Syndromes (ACS) 2016*. Heart Lung Circ*, 25(9), 895-951.

Thomsett, R. & Cullen, R. (2018). The Assessment and Management of Chest Pain in Primary Care: A Focus on Acute Coronary Syndrome*. Australian Journal of General Practice.* The Royal Australian College of General Practitioners, 47(5), 246-251.


## 7. Related documents

Clinical Observations and Deteriorating Patient Policy

## 8. Notes

| | | | | |
|---|---|---|---|---|
| 8.1 | Contact Officer | Primary point of contact for this policy and any queries relating to it | Mareen Maladda/Morgan Smith | |
| 8.2 | Policy Category | Which over-arching category does the policy belong? | Clinical<br>Clinical and Operational<br>Operational | |
| 8.3 | Key Words | Include all key words to enable searching for policy – consider *other names* or terms used to describe the content | Chest Pain Management, Characteristic and severity of pain, PQRST approach, | |
| 8.4 | Relevant to | Please indicate all departments that this policy is relevant to | Admissions<br>All Clinical<br>All Areas<br>Angiography<br>Endoscopy<br>Operating Theatres | Radiology<br>Wards<br>Oncology<br>ICU/CCU |

## *9.* Policy and Procedure Committee Endorsement – *Completed by Patient Safety and Quality*

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|---|---|---|---|
| 9.1 | Implementation Plan | As nominated by the Policy and Procedure Committee for communication in appropriate areas and implementation of such | 1. High Risk Communication<br>2. L&D Input into Plan<br>3. For general Document Review Register |
| 9.2 | Approval Authority | Final Sign off | Policy and Procedure Committee |

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| 9.3 | Date Approved | As per Policy and Procedure Committee | |
| 9.4 | Review Date | Standard review date is three years unless earlier is required | July 2021 |

## 10. Metadata – for upload process

| | | | |
|---|---|---|---|
| 10.1 | Documents superseded by this policy | List of any policy documents or previous authorities superseded by this policy. | Chest Pain management Flow Chart Wards, Version 2.0/Oct 2015<br>Chest Pain – Patient Management (ICU-CCU), Version 2.0/June 2011<br>Chest Pain-Patient Management (Wards), Version 5.0/Oct 2015 |
| 10.2 | Version History | Version Date (Month/Year) | Version 2.0/June 2011<br>Version 2.0/Oct 2015<br>Version 5.0/Oct 2015 |

# POLICY REVIEW TOOL

**Purpose**

This tool is for use by staff members when developing/reviewing policies. Submit a copy of the completed form with the proposed new/revised policy to all members of the applicable committee as a guide for their review.

**Title of Policy for Review**: Chest Pain Management Policy

**Date of Review**: July 2019

| Criteria | Meets Criteria | | Comments/Changes required |
|---|---|---|---|
| | Yes | No | |
| Reason for the review or new development | | | RCA recommendation/ Policy was reviewed in line with current evidence based practice and NSW Health policy |
| Does the policy comply with current:<br>• Legislation<br>• NSW Health<br>• Clinical Excellence Commission<br>• ACORN, HICMR, Other | | | NSW Health |
| Does the policy reflect consistency with current practice standards:<br>• Best Practice<br>• Research<br>• Literature<br>Review current reference list and update | | | As above and as per reference list |
| Allocated Reviewers<br>• Relevant NUM / Manager<br>• Pharmacist (if relevant)<br>• Medical Directorate<br>• Expert in Field / Educator | | | Senior Cardiologist – Edward Barin<br>Nurse Unit Manager Ward 3 – Ann Fernandez<br>Nurse Unit Manager ICU – Jodie Burke<br>Nurse Educator Perioperative Services – Edwina Holmes |

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|---|---|---|---|
| | | | Structural Heart Clinical Nurse Consultants – Mareen Maladda & Morgan Smith |
| Executive Sponsor Name | | | Deborah O'Neill |

**Policy Reviewed by**:

| Name: | Title: | Signature: |
|---|---|---|
| **Edward Barin** | **A/Professor Cardiology** | **Content reviewed. Amendment made** |
| **Jodie Burke** | **Nurse Unit Manager ICU** | **Content reviewed. Amendment made** |
| **Ann Fernandez** | **Nurse Unit Manager Ward 3** | **Content reviewed** |
| **Edwina Holmes** | **Nurse Educator Perioperative Services** | **Content reviewed. Amendment made** |
| **Mareen Maladda** | **Structural Heart Disease Clinical Nurse Consultant** | **Content reviewed. Amendment made** |
| **Morgan Smith** | **Cardiac Case Coordinator/Structural Heart Disease Clinical Nurse Consultant** | **Content reviewed. Amendment made** |
| **Zara Dobbs** | **Patient Safety and Quality Facilitator** | **Content reviewed. Amendment made** |