# MULTIDISCIPLINARY MANAGEMENT OF BLUNT CHEST TRAUMA – CHIP

**(CHest Injury Pathway)**

<table>
<thead>
<tr>
<th>Cross references (including NSW Health/SESIAHS policy directives)</th>
<th>Evidence based recommendations for the activation of a multidisciplinary team (MDT) to manage patients presenting with blunt chest wall trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>What it is</strong></td>
<td>Medical officers working in the Emergency Department, Surgical and Medical Registrars. Allied Health professionals including Physiotherapy.</td>
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<td>2. <strong>Who it applies to</strong></td>
<td>When managing patients with blunt chest wall trauma</td>
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<td>3. <strong>When to use it</strong></td>
<td>As a clinical pathway with a multidisciplinary team approach for patients with blunt chest wall trauma</td>
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<td>4. <strong>How to use it</strong></td>
<td>To minimise the significant morbidity associated with blunt chest wall trauma particularly in elderly patients</td>
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<td>5. <strong>Why the rule is necessary</strong></td>
<td>All clinicians who manage patients with blunt chest wall trauma</td>
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</table>
| 6. **Who is responsible** | 1. All patients with blunt chest injury are to be considered for this pathway.  
3. The role of the ED Doctor is to recognise patients eligible for this pathway attend to their immediate analgesia and respiratory support and initiate the 1st Tier CHiP (CHest Injury Pathway) page when appropriate.  
4. The role of the Surgical Registrar carrying the Trauma page is to assess whether a 2nd Tier MDT (Multi-Disciplinary Team) approach is required and escalate if needed.  
5. The 1st Tier of the CHiP page will alert the MDT, including the Trauma Registrar, Anaesthetic Registrar out of hours or pain team registrar, Pain Team CNC, ICU Liaison Nurse and Physiotherapist to enable early contact and optimal management. This should be responded to within 60 minutes of the page activation.  
6. The 2nd Tier of the CHiP page involves consultations with specialist teams such as Aged Care, Respiratory, Cardiothoracic and ICU Teams as needed.  
7. All patients 55 years and older with proven or suspected rib fractures, or a painful chest injury with respiratory disease and/or requiring opiate analgesia should be admitted under the Trauma Service. A CHiP page should be activated to facilitate management.  
8. All patients under 55 years with 3 or more rib fractures or a painful chest injury with evidence of deterioration (tachypnoea, decreased SaO₂, respiratory fatigue) should also be admitted under the Trauma Service. A CHiP page should be activated to facilitate management. |
9. Incentive spirometry (TriFlow) must be administered to patients with blunt chest trauma as soon as patient is admitted to the ward/HDU.

10. 

**CHEST INJURY PATHWAY**

**AGE**

- <55
  - ≥3 rib #s
    - NO
    - YES
      - Oral analgesia
        - Regular paracetamol
        - Opioids
        - +/- NSAID if no contraindications
        - Physiotherapy
      - Persistent respiratory compromise or:
        - fever
        - tachypnoea
        - productive cough
        - CXR changes
          - YES
          - NO
            - Discharge when pain well-controlled
            - NO

- ≥55
  - Any rib #
    - YES
    - NO
      - Underlying lung disease
        - YES
        - NO
          - Requiring opioid analgesia
            - YES
            - NO
              - Continue oral analgesia
              - Persistent respiratory compromise or:
                - fever
                - tachypnoea
                - productive cough
                - CXR changes
                  - YES
                  - NO

**Call 777**

**ACTIVATE**

**CHIP + Provide MRN**

(24 hr page system)

8 Compliance evaluation

The trauma service has 7 day a week coverage and routinely assesses all trauma patient admissions. Compliance with this CBR will be evaluated through routine trauma patient rounds. The trauma service also collects data, including quality improvement data on all trauma patient admissions and it is expected that improved outcomes will be seen in this patient group.

9. External references

Central Hospital Network

I, Mary Langcake, Director of Trauma Service of Central Hospital Network attest that this business rule is not in contravention of any legislation, industrial award or policy directive.

Revision and approval history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision number</th>
<th>Contact Officer (Position)</th>
<th>Date for revision</th>
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<tbody>
<tr>
<td>Jan 2011</td>
<td>0</td>
<td>Mary Langcake, Director of Trauma</td>
<td>Jan 2014</td>
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