Α	 Airway Voice – quality, breathiness, speaking in sentences. Airway noises – stridor, audible upper airway secretions. 	
B	 Breathing RR, Sp0₂, supplemental oxygen requirement. Breath sounds on auscultation. Chest wall – external bruising or deformity, symmetry, flail. Estimated inspiratory capacity – chest wall movement with quiet and deep breathing, performance of incentive spirometry (ability to sustain max inspiration or achieve volume >1000ml on volume device). Cough – moist or dry, maximal volitional effort or pain inhibited. Dyspnoea rating score – VAS or Modified BORG dyspnoea scale. CXR. 	
С	 Cardiovascular/circulatory HR, cardiac rhythm, BP. 	
D	 Disability Assess GCS. Pain rating scores – at rest, on movement/deep breath/cough. 	
Ε	ExposureAssess other injuries.ICC observations.	

Specific management

- 1. Referral to Acute Pain Management service and effective pain relief.
- 2. Upright positioning when in bed.
- 3. Early mobilisation and sitting out of bed.
- 4. Deep breathing exercises (+/- incentive spirometry).
- 5. Oxygen therapy +/- humidification.

Pre-simulation briefing

Establishing a safe container for learning in simulation

Clarify objectives, roles and expectations

- Introductions
- Learning objectives
- Assessment (formative vs summative)
- Facilitators and learners' roles
- Active participants vs observers

Maintain confidentiality and respect

- Transparency on who will observe
- Individual performances
- · Maintain curiosity

Establish a fiction contract

Seek a voluntary commitment between the learner and facilitator:

- Ask for buy-in
- Acknowledge limitations

Conduct a familiarisation

- Manikin/simulated patient
- Simulated environment
- Calling for help

Note: Adjust the pre-simulation briefing to match the demands of the simulation event, contexts or the changing of participant composition.

Address simulation safety

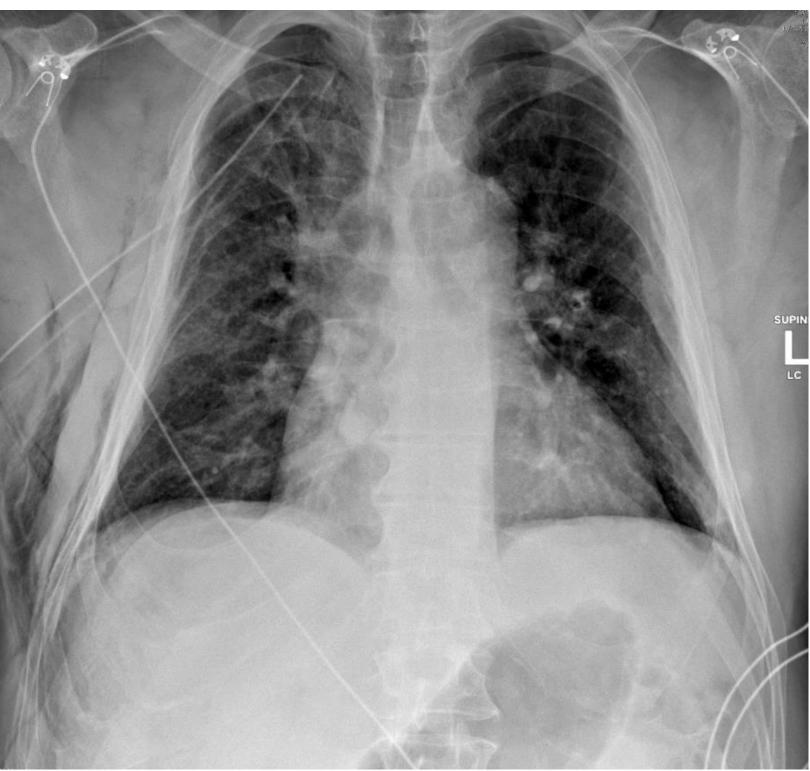
Identify risks:

- Medications and equipment
- Electrical or physical hazards
- Simulated and real patients

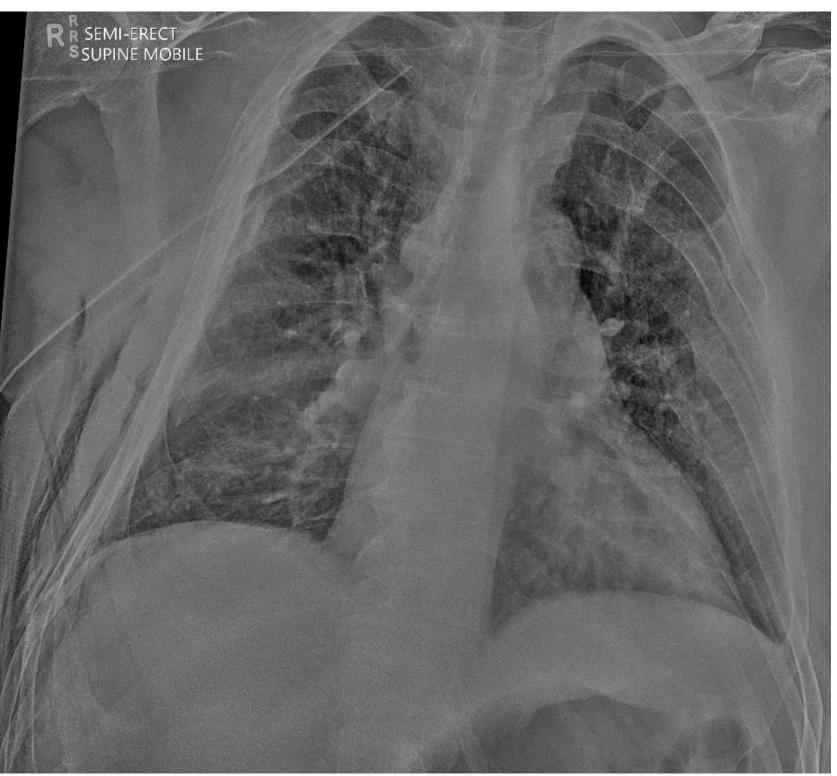
V2 Effective: 1/7/2021. Adapted from Rudolph, J., Raemer, D. and Simon, R. (2014). Establishing a Safe Container for Learning in Simulation. Simulation in Healthcare: Journal of the Society for Simulation in Healthcare, 9(6), pp.339-349.











Follow ATLS/EMST guidelines for initial assessment and management of all trauma patients

For specific blunt chest trauma: Assessment and Management

If the patient is unable to cough, take a deep breath or mobilise – an inpatient admission is required.

Consider an ICU review when any clinical deterioration is detected (e.g. \uparrow 02 or flow demand, \uparrow WOB, \uparrow ADDS score, \downarrow SpO2 or multiple red flags present). Escalate care as per local guidelines.

Arrange a review by the appropriate clinical team

Consider transfer to a major trauma centre and ensure early activation of the retrieval process³⁵ through **RSQ (1300 799 127)** where applicable Red flags for potential deterioration Age >55years Uncontrolled pain

Previous lung disease: Smoker, COPD, asthma Morbid obesity

Respiratory compromise: ↑WOB, ↑RR, ↓SpO2 ≥3 fractured ribs Shallow breathing Inability to cough

Associated injuries: Pneumothorax or haemothorax Pulmonary contusion Flail chest

Respiratory
AdjunctsAnalgesiaIncentive Spirometry
Hourly deep
breathingReferral to the Acute
Service (or equivalent
decision is made to at
RED FLAG risk factor
for consideration of a
Ensure regular oral at
Simple analgesia - p
Appropriate dose)Physiotherapist
Consider HFNPSimple analgesia - p
appropriate dose)

Ward-based Care

(Flow/Fi02 and target SpO2 to be documented in the patients' medical record)

Analgesia Referral to the Acute Pain Management Service (or equivalent if available) once a decision is made to admit the patient. If any RED FLAG risk factors are present, also refer for consideration of a Regional Block or PCA. Ensure regular oral analgesia is available Simple analgesia - paracetamol (age/weight appropriate dose) NSAID - if clinically appropriate, review every 3 days

Consider respiratory adjuncts, analgesia requirements, and prevention of complications

Oral Opioids - immediate or slow release or PRN

Patient Controlled Analgesia (PCA) - Opioid Regional blocks - Erector Spinae Plane (ESP), Serratus Anterior Plane (SAP) , Intercostal Nerve (ICN), paravertebral Epidural

Other - Ketamine - continuous infusion, Gabapentinoids

Complication Prevention Early documented clearance to mobilise Encourage sitting out of the bed Elevate bedhead Daily chest physiotherapy Early nutrition Regular aperients VTE prophylaxis (chemical and/or mechanical)

Admission

Intensive Care/High Dependency Unit: Respiratory management above ward-level care

Haemodynamic monitoring requirement Inotrope requirement And/or other injuries requiring ICU management

Ward Admission

Admission to either a surgical or medical ward bed will be dependent on local patient admission procedures. The patient management should be supported by the appropriate treating team/s.

Telemetry Bed

If there is clinical concern for cardiac contusion or a new ECG change and/or elevated troponin: Continuous cardiac monitoring (telemetry) is indicated for 24 to 48hrs^{1,2} Cardiology review/admission for consideration of echo

Transfer to Major Trauma Centre

Consider transfer to a major trauma centre for the following patients, as per local quidelines.

Ensure early activation of retrieval with RSQ Significant major trauma involving more than one body region

Patients requiring ventilatory support Haemothorax with significant ICC drainage Large tracheobronchial injury, cardiac

tamponade, clinical flail chest Sternal fracture with cardiac contusion

Mediastinal or great vessel injury³

Consideration of surgical rib fixation⁴

Discharge Planning

Wean HFNP and analgesia as clinically indicated

Liaise with multidisciplinary team on any barriers to discharge such as mobility, carer support, home environment, return to work/activity limitations

Discharge home when pain well controlled on oral analgesics and respiratory function optimised - Provide prescriptions for oral analgesia and aperients if required

- Ensure opioid weaning plan is documented in the Discharge Summary for the GP
- Arrange all follow up appointments including GP follow up within 3 days of discharge
- Provide patient with an information leaflet or relevant handout
- Arrange all follow up appointments including GP follow up within 3 days of discharge

Consideration for special patient groups

Elderly frail patients aged >65 - Early recognition, low threshold for CT, GP/Geriatrician/medical input, and opioid sparing analgesia strategies i.e. regional blocks.

Obstetric trauma patients Refer to Maternity and Neonatal Clinical Guideline *Trauma in Pregnancy*⁵ **Paediatric trauma patients** Refer to Paediatric Trauma Service: *Trauma Guidelines* 11th Edition⁶

PIC Score 2 3 4 5 6 7 8 9 10 Inspiration Pain Cough Inspiratory spirometer; goal and alert Patient-reported, 0-10 scale Assessed by bedside nurse levels set by respiratory therapist 4 – Above goal volume 3 - Strong 3 - Controlled (Pain intensity scale 0-4) 3 – Goal to alert volume 2 - Weak 2 - Moderate (Pain intensity scale 5-7) 2 – Below alert volume 1 - Absent 1 - Severe 1 – Unable to perform (Pain intensity scale 8-10) incentive spirometry

Patient name:	Date:	IS Goal:	