

Rib Fracture Clinician Questionnaire

A. Introduction

What is this study about?

Rib fractures are a very common clinical problem that frequently require hospital admission. Early complications require prompt detection and management. In the hours and days post fracture, pleural contusions, with or without the consequences of inadequate analgesia, can exacerbate ventilatory failure.

Pain from rib fractures limits chest wall movement resulting in reduced tidal volumes and the inability to effectively cough with associated sputum retention and associated lung collapse due to failed clearance. The retention of sputum can also increase the likelihood of pneumonia and accounts for much of the delayed mortality after chest wall trauma.

Elderly individuals who have fallen from standing now make up most trauma patients. Thoracic injuries, including rib fractures, are the second most common injury in this population. Elderly patients who sustain blunt chest trauma with rib fractures have twice the mortality and thoracic morbidity of younger patients with similar injuries.

Inclusions

Patients aged 18 and older who were admitted to hospital as an emergency between 01/01/2025 and 30/06/2025 with one or more rib fracture.

Up to 6 patients per hospital were selected for inclusion in the study.

Who should complete this questionnaire?

This questionnaire should be completed by the named consultant, or the most appropriate clinician consultant, responsible for the patient's care when they were treated in hospital.

Questions or help

For more information <https://www.ncepod.org.uk/Ribfractures.html>

For any questions about this study or questionnaire, contact ribfracture@ncepod.org.uk or call 0207 251 9060.

CPD accreditation

Completing NCEPOD questionnaires helps consultants contribute to patient care investigations, review their clinical management, and engage in personal reflection. This activity supports continuing professional development (CPD) and can be recorded as evidence for appraisals.

About NCEPOD

The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) reviews healthcare practice by undertaking confidential studies, and makes recommendations to improve the quality of the delivery of care, for healthcare professionals and policymakers to implement. Data to inform the studies are collected from NHS hospitals and Independent sector hospitals across England, Wales, Northern Ireland and Jersey. NCEPOD are supported by a wide range of bodies and the Steering Group consists of members from the Medical Royal Colleges and Specialist Associations, as well as observers from The Coroners Society of England and Wales, and the Healthcare Quality Improvement Partnership (HQIP).

Impact of NCEPOD

Recommendations from NCEPOD reports have had an impact on many areas of healthcare including: Development of the NICE 'Acutely ill patients in hospital guideline' (CG50) - following publication of the 2005 'An Acute Problem' report.

Appointment of a National Clinical Director for Trauma Care- following publication of 'Trauma: Who Cares?' 2007.

Development of NICE Clinical Guidelines for Acute Kidney Injury, published in 2013 - 'Adding Insult to Injury' 2009.

Development of ICS Standards for the care of adult patients with a temporary Tracheostomy, published 2014 - 'On the right trach?' 2014.

Development of guidelines from the British Society of Gastroenterology: diagnosis and Management of acute lower gastrointestinal bleeding, published 2019 - 'Time to Get Control' 2015.

Development of the British Thoracic Society's Quality Standards for NIV, published 2018 - 'Inspiring Change' 2017.

This study was commissioned by The Healthcare Quality Improvement Partnership (HQIP) as part of the Clinical Outcome Review Programme

1. Please use this space to provide a brief overview of the admission to hospital, including any treatment provided for the management of rib fractures

2a. Age at the time of admission

 years

Unknown

Value should be between 18 and 110

2b. Sex

Male Female Other

2c. Ethnicity

- White British/White - other
- Black/African/Caribbean/Black British
- Asian/Asian British (Indian, Pakistani, Bangladeshi, Chinese, other Asian)
- Mixed/Multiple ethnic groups
- Unknown

If not listed above, please specify here...

3a. Usual place of residence

Own home Supported living Residential home Nursing home
 Homeless Unknown

If not listed above, please specify here...

**3b. If answered "Own home" to [3a] then:
Did the patient live alone?**

Yes No Unknown

4. Did this patient have a learning disability?

Yes No Unknown

5. Please make an estimation of the patient's Rockwood Clinical Frailty score prior to the admission:

https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2022/02/rockwood-frailty-scale_.pdf

- 1. Very Fit 2. Well 3. Managing Well
- 4. Vulnerable 5. Mildly Frail 6. Moderately Frail
- 7. Severely Frail 8. Very Severely Frail 9. Terminally Ill
- Unable to ascertain

6a. Did the patient have any co-morbidities predating this admission?

- Yes No Unknown

**6b. If answered "Yes" to [6a] then:
Which co-morbidities**

Please mark all that apply

- | | |
|---|---|
| <input type="checkbox"/> Asthma | <input type="checkbox"/> COPD |
| <input type="checkbox"/> Coronary Artery Disease | <input type="checkbox"/> Cardiac Valve Disease |
| <input type="checkbox"/> Cerebrovascular Accident (CVA) | <input type="checkbox"/> Chronic lung disease |
| <input type="checkbox"/> CKD | <input type="checkbox"/> Heart Failure |
| <input type="checkbox"/> Hypertension | <input type="checkbox"/> Hypercholesterolemia/lipidemia |
| <input type="checkbox"/> Osteoporosis | <input type="checkbox"/> Osteo-arthritis |
| <input type="checkbox"/> Rheumatoid arthritis | <input type="checkbox"/> Cancer - Currently under treatment |
| <input type="checkbox"/> Cancer - Historical diagnosis | <input type="checkbox"/> Chronic Pain Syndromes |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Regular analgesia use |
| <input type="checkbox"/> Regular anticoagulant use | <input type="checkbox"/> Regular antiplatelet use |
| <input type="checkbox"/> Previous spinal surgery | <input type="checkbox"/> Cognitive impairment |

Please specify any additional options here...

7. Did the patient have a history of falls in the last 6 months prior to this admission?

- Yes No Unknown

8. Was a DNACPR, TEP, RESPECT or equivalent in place for the patient?

- | | |
|---|---|
| <input type="radio"/> Yes - in place prior to admission | <input type="radio"/> Yes - during initial clerking |
| <input type="radio"/> Yes - during admission | <input type="radio"/> No |
| <input type="radio"/> Unknown | |

If not listed above, please specify here...

9a. Tobacco smoking history

- Current smoker Ex-smoker Never smoked Unknown

If not listed above, please specify here...

9b. Nicotine vaping history

- Current vaper Ex-vaper Never vaped Unknown

If not listed above, please specify here...

9c. Was the patient documented as having alcohol use disorder (AUD)?

- Yes No Unknown

Rib fractures and other injuries

10a. What was the mechanism of injury?

- Road traffic vehicle incident
- Pedestrian versus vehicle
- Fall from non-motorised bike
- Fall from < 2 metres
- Assault
- Crush injury
- Non motorised bike versus vehicle
- Fall from >2 metres
- Fall from standing
- CPR for out of hospital cardiac arrest

If not listed above, please specify here...

10b. Was there evidence of alcohol or recreational drug intoxication contributing to the mechanism of injury?

- Yes
- No
- Unknown

10c. Was the injury on the day of presentation to hospital?

- Yes
- No
- Unknown

10d. If answered "No" to [10c] then:

Number of days before hospital presentation that the injury occurred

Round up or down to nearest number of full days

Unknown

11a. Total number of rib fractures

Specifically the number of fractures, not number of ribs broken

fractures

Unknown

11b. Location of rib fractures

- Unilateral
- Bilateral
- Unknown

If not listed above, please specify here...

11c. From the radiology report, are any identified rib fractures displaced?

- Yes
- No
- Unknown

11d. From the radiology report, is there a flail segment?

- Yes
- No
- Unknown

12a. Did the patient have any associated thoracic fractures?

- Yes
- No
- Unknown

12b. If answered "Yes" to [12a] then:

Associated thoracic fractures

- Clavicle
- Scapula
- Thoracic vertebral fractures
- Sternum
- Manubrium

Please specify any additional options here...

13a. Did the patient have any associated thoracic injuries identified on initial imaging/clinical assessment?

- Yes
- No
- Unknown

**13b.If answered "Yes" to [13a] then:
Associated thoracic injuries**

- Atelectasis
- Subcutaneous emphysema
- Lung contusion
- Pneumothorax
- Haemothorax
- Radiologically diagnosed flail segment
- Clinically identified flail segment (i.e. paradoxical movement)
- Tracheobronchial injury
- Injury to the heart or great vessels

Please specify any additional options here...

14a.Did the patient have any extra-thoracic injuries?

- Yes No Unknown

**14b.If answered "Yes" to [14a] then:
Extra-thoracic injuries**

- | | |
|--|---|
| <input type="checkbox"/> Head injury with traumatic brain injury | <input type="checkbox"/> Head injury without traumatic brain injury |
| <input type="checkbox"/> Abdominal injury | <input type="checkbox"/> Spinal injury |
| <input type="checkbox"/> Pelvic injury | <input type="checkbox"/> Long bone injury |
| <input type="checkbox"/> Non-long bone fracture | <input type="checkbox"/> Burn injury |
| <input type="checkbox"/> Soft tissue injury (non-burn) | <input type="checkbox"/> Traumatic amputation |

Please specify any additional options here...

Risk stratification

15a.Were risk stratification scores calculated to determine management of the rib fractures?

- Yes No Unknown

**15b.If answered "Yes" to [15a] then:
Which risk stratification scores?**

- STUMBL/Battle score
- RibScore
- Sequential Clinical Assessment of Respiratory Function (SCARF) score

Please specify any additional options here...

**15c. If answered "STUMBL/Battle score" to [15b] then:
What was the score? (STUMBL/Battle score)**

- Unknown

**15d.If answered "RibScore" to [15b] then:
What was the score? (RibScore)**

- Unknown

**15e.If answered "Sequential Clinical Assessment of Respiratory Function (SCARF) score" to [15b] then:
What was the Score? (SCARF)**

- Unknown

**15f. If answered to [15b] then:
What was the score? (Other)**

Unknown

**15g. If answered "Yes" to [15a] then:
Was the score recorded in ED?**

Yes

No

Unknown

16a. Was a NEWS2 score calculated on presentation to hospital?

Yes

No

Unknown

**16b. If answered "Yes" to [16a] then:
What was the score?**

Unknown

17a. Does this hospital have a rib fracture guideline/pathway?

Yes

No

Unknown

**17b. If answered "Yes" to [17a] then:
Was it used for this patient?**

Yes

No

Unknown

**17c. If answered "No" to [17b] then:
Why wasn't the guideline/pathway followed?**

GP/primary care input

1a. Was the patient seen by the GP/primary care in relation to this admission prior to presenting to hospital?

- Yes No Unknown

1b. If answered "Yes" to [1a] then:

What date was the patient seen by a GP/primary care?

Unknown

1c. If answered "Yes" to [1a] then:

Was the patient given analgesia by the GP/in primary care?

- Yes No Unknown

1d. If answered "Yes" to [1c] then:

What was given?

- Oral paracetamol IV Paracetamol NSAIDS Oral opiates
 IV opiates

Please specify any additional options here...

Ambulance transfers

2a. Was the patient transferred to hospital by ambulance?

- Yes No Unknown

2b. If answered "Yes" to [2a] then:

Was a pain score calculated pre-hospital?

- Yes No N/A (e.g patient unconscious)
 Unknown

2c. If answered "Yes" to [2a] then:

Did the patient receive analgesia pre-hospital?

- Yes No Unknown

2d. If answered "Yes" to [2a] and "Yes" to [2c] then:

What analgesia was given pre-hospital?

- Oral paracetamol IV Paracetamol NSAIDS Oral opiates
 IV opiates Pentrox Entonox

Please specify any additional options here...

2e. If answered "Yes" to [2a] then:

What other interventions were performed pre-hospital?

- CPR Oxygen Intubation Thoracostomy
 None Unknown

Please specify any additional options here...

D. Initial management

1a. Date of arrival to hospital

This should be between 01/01/2025 and 30/06/2025 inclusive

Unknown

1b. Time of arrival to hospital

Unknown

2a. Mode of transfer to ED

Walk/self

Ambulance

GP referral

Unknown

If not listed above, please specify here...

**2b. If answered "Ambulance" to [2a] then:
If by ambulance was there a pre-alert for trauma?**

Yes

No

Unknown

**2c. If answered "No" to [2b] then:
If no was there a trauma call on arrival?**

Yes

No

Unknown

**2d. If answered "Walk/self", "GP referral" or "Unknown" to [2a] then:
If Not by ambulance, was there a trauma call on arrival?**

Yes

No

Unknown

3a. Date of first review

Not triage

Unknown

3b. Time of first review

Unknown

3c. Was this a trauma team review?

Yes

No

Unknown

**3d. If answered "No" or "Unknown" to [3c] then:
If No/unknown, grade of person doing the review?**

Consultant

Specialty and associate specialist grade (SAS grade)

Senior clinical fellow

Resident with CCT

Resident doctor/specialist trainee (ST6-8 or equivalent)

Resident doctor/specialist trainee (ST3-5 or equivalent)

Resident doctor (below ST3 or equivalent)

Specialist nurse

Registered nurse

Unknown

If not listed above, please specify here...

What were the patients first documented vital signs in the ED

4a. Systolic BP

 mm Hg

Unknown

4b. Diastolic BP

 mm Hg

Unknown

4c. Heart Rate

 bpm

Unknown

4d. Respiratory rate

 breaths/min

Unknown

4e. Oxygen saturation

 %

Unknown

4f. Was supplemental oxygen given?

Yes No Unknown

4g. What was the patient's GCS on arrival?

3 4 5 6
 7 8 9 10
 11 12 13 14
 15 Not recorded

4h. What was the patient's ACVPU on arrival?

Alert Confused Verbal
 Pain Unresponsive
 Not recorded as GCS measured Unknown

5a. What investigations were done during the ED assessment?

- Venous blood gas
- Arterial blood gas
- Full trauma scan (head/neck, chest, abdomen, pelvis)
- ECG
- Plain CXR
- Plain radiology (other)
- CT chest - contrast
- CT chest non-contrast

Please specify any additional options here...

5b. If answered "ECG" to [5a] then:

Did the ECG show evidence of arrhythmias or heart block?

Yes No Unknown

6. Was a pain score calculated in ED?

Yes No N/A (e.g patient unconscious)
 Unknown

7a. Was the patient given analgesia in the ED?

Yes No Unknown

**7b. If answered "Yes" to [7a] then:
What analgesia was given in the ED?**

Please mark all that apply

- | | |
|--|---|
| <input type="checkbox"/> PCA/NCA | <input type="checkbox"/> Thoracic epidural |
| <input type="checkbox"/> Paravertebral Block | <input type="checkbox"/> Intercostal Nerve Block |
| <input type="checkbox"/> Erector Spine Plane Block | <input type="checkbox"/> Serratus Plane Block |
| <input type="checkbox"/> Gabapentinoids | <input type="checkbox"/> Pregablin |
| <input type="checkbox"/> Amitriptyline | <input type="checkbox"/> Lidocaine (Lignocaine) Patches |
| <input type="checkbox"/> Oral opiates | <input type="checkbox"/> IV opiates |
| <input type="checkbox"/> IV paracetamol | <input type="checkbox"/> Oral paracetamol |
| <input type="checkbox"/> NSAIDS | <input type="checkbox"/> Pentrox |
| <input type="checkbox"/> Entonox | |

Please specify any additional options here...

**7c. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Single dose or infusion (ED)**

- Single Infusion Unknown

If not listed above, please specify here...

**7d. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Date nerve block done**

Unknown

**7e. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Time nerve block done**

Unknown

**7f. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Specialty that did nerve block**

- Emergency medicine Anaesthetics Acute pain team Unknown

If not listed above, please specify here...

**7g. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Grade of person that did the nerve block?**

- Consultant
 Specialty and associate specialist grade (SAS grade)
 Senior clinical fellow
 Resident with CCT
 Resident doctor/specialist trainee (ST6-8 or equivalent)
 Resident doctor/specialist trainee (ST3-5 or equivalent)
 Resident doctor (below ST3 or equivalent)
 Unknown

If not listed above, please specify here...

**7h. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Where was the nerve block done?**

ED

ED resus

Theatres

Unknown

If not listed above, please specify here...

**7i. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [7b] then:
Was the block successful (ED)?**

Yes

No

Unknown

1a. What ward was the patient first admitted to?

- | | |
|---|---|
| <input type="radio"/> Short stay ED or observation ward | <input type="radio"/> Acute medical unit |
| <input type="radio"/> General medical | <input type="radio"/> Care of the elderly |
| <input type="radio"/> General surgical | <input type="radio"/> Orthopaedic |
| <input type="radio"/> Critical Care | <input type="radio"/> Cardiothoracic |
| <input type="radio"/> Trauma | |

If not listed above, please specify here...

1b. Which was the primary specialty that looked after the patient?

- | | | |
|--|--|---|
| <input type="radio"/> Elderly Care | <input type="radio"/> General medicine | <input type="radio"/> Trauma & Orthopaedics |
| <input type="radio"/> General Surgery | <input type="radio"/> Thoracic Surgery | <input type="radio"/> Critical care |
| <input type="radio"/> Respiratory Medicine | | |

If not listed above, please specify here...

2a. Were additional investigations undertaken during the admission?

- Yes No Unknown

2b. If answered "Yes" to [2a] then:**What additional investigations were done during the admission?**

- Venous blood gas
 Arterial blood gas
 Full trauma scan (head/neck, chest, abdomen, pelvis)
 ECG
 Plain CXR
 Plain radiology (other)
 CT chest - contrast
 CT chest non-contrast
 Delirium screen

Please specify any additional options here...

2c. Was a lying/standing blood pressure done?

- Yes No Unknown

2d. If answered "Yes" to [2c] then:**Was there BP evidence of postural hypotension?**

- Yes No Unknown

2e. If answered "ECG" to [2b] then:**Did the ECG show evidence of arrhythmias or heart block?**

- Yes No Unknown

3a. Were antibiotics prescribed during the admission?

- Yes No Unknown

3b. If answered "Yes" to [3a] then:**Was this for a respiratory indication?**

- Yes No Unknown

3c. Did the patient have a chest drain inserted?

- Yes No Unknown

**3d. If answered "Yes" to [3c] then:
In which location was the chest drain inserted?**

- Pre-hospital setting ED Critical care setting
 Ward Theatre Unknown

If not listed above, please specify here...

4a. Was the patient given analgesia/further analgesia after admission?

- Yes No Unknown

**4b. If answered "Yes" to [4a] then:
What analgesia was given after admission?**

Please mark all that were given during the admission (not including in the ED)

- PCA/NCA Thoracic epidural Paravertebral Block
 Intercostal Nerve Block Erector Spine Plane Block Serratus Plane Block
 Gabapentinoids Pregablin Amitriptyline
 Lidocaine/Lignocaine Patches Oral opiates IV opiates
 IV paracetamol Oral paracetamol NSAIDS

Please specify any additional options here...

**4c. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:
Single dose or infusion**

- Single Infusion Unknown

If not listed above, please specify here...

**4d. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:
Date nerve block done**

- Unknown

**4e. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:
Time nerve block done**

- Unknown

**4f. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:
Specialty that did nerve block**

- Anaesthetics Acute pain team Orthopaedics General Surgery
 Critical Care Thoracic Surgery Unknown

If not listed above, please specify here...

**4g. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:
Where was the nerve block done?**

- Ward Theatre complex Critical Care Unknown
 Unknown

If not listed above, please specify here...

4h. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:

Was the block successful?

- Yes No Unknown

4i. If answered "Thoracic epidural", "Paravertebral Block", "Intercostal Nerve Block", "Erector Spine Plane Block" or "Serratus Plane Block" to [4b] then:

Did the patient require a further nerve block?

- Yes No Unknown

5a. Was the patient seen by an acute pain team?

- Yes No Unknown

**5b. If answered "Yes" to [5a] then:
Date of first pain team assessment**

Unknown

**5c. If answered "Yes" to [5a] then:
Time of first pain team assessment?**

Unknown

6a. Were deep breathing exercises recommended to the patient?

- Yes No Unknown

**6b. If answered "Yes" to [6a] then:
Which specialty discussed deep breathing exercises with the patient?**

- Medical Team Physiotherapy Nursing Staff
 Critical Care Outreach Pain team

Please specify any additional options here...

**6c. If answered "Yes" to [6a] then:
Date of the first discussion of deep breathing exercises**

Unknown

**6d. If answered "Yes" to [6a] then:
Is there documentation that the patient was given an information leaflet on deep breathing exercises?**

- Yes No Unknown

**6e. If answered "Yes" to [6a] then:
Is there documented evidence in the notes of patient doing breathing exercises?**

- Yes No Unknown

7a. Did the patient require ventilatory support because of their rib fractures?

- Yes No Unknown

**7b. If answered "Yes" to [7a] then:
What type of ventilatory support was provided?**

- High Flow Nasal Oxygen Continuous positive airway pressure (CPAP)
 Bilevel Positive Airway Pressure (BIPAP) Mechanical ventilation

Please specify any additional options here...

8a. Did the patient undergo any ward transfers during this admission?

- Yes No Unknown

**8b. If answered "Yes" to [8a] then:
Reason for transfer(s)?**

- | | |
|---|--|
| <input type="checkbox"/> Analgesia provision - PCA/NCA | <input type="checkbox"/> Analgesia provision - nerve block |
| <input type="checkbox"/> Escalation in care - ventilatory support | <input type="checkbox"/> Escalation in care - other |
| <input type="checkbox"/> Ongoing care/rehabilitation | <input type="checkbox"/> Oxygen requirement |

Please specify any additional options here...

8c. If answered "Analgesia provision - PCA/NCA" or "Analgesia provision - nerve block" to [8b] then:

Which ward was the patient transferred to for analgesia provision?

- | | | | |
|--|---------------------------------------|---|-----------------------------------|
| <input type="radio"/> Critical care | <input type="radio"/> General medical | <input type="radio"/> Care of the elderly | <input type="radio"/> Respiratory |
| <input type="radio"/> Thoracic surgery | <input type="radio"/> Trauma unit | <input type="radio"/> General surgical | |

If not listed above, please specify here...

8d. Which specialties were involved in the patient's care?

- | | | |
|---|--|---|
| <input type="checkbox"/> Elderly Care | <input type="checkbox"/> Trauma & Orthopaedics | <input type="checkbox"/> General medicine |
| <input type="checkbox"/> Major Trauma | <input type="checkbox"/> General Surgery | <input type="checkbox"/> Thoracic Surgery |
| <input type="checkbox"/> Critical Care | <input type="checkbox"/> Respiratory Medicine | <input type="checkbox"/> Physiotherapy |
| <input type="checkbox"/> Occupational Therapy | <input type="checkbox"/> Pain Team | |

Please specify any additional options here...

Rib fracture stabilisation

9a. Was surgical stabilisation of rib fractures undertaken?

- Yes No Unknown

**9b. If answered "Yes" to [9a] then:
Where was this undertaken?**

- | | |
|---|--|
| <input type="radio"/> Onsite | <input type="radio"/> Different hospital same Trust/Health board |
| <input type="radio"/> Transferred to another Trust/Health board | <input type="radio"/> Unknown |

If not listed above, please specify here...

**9c. If answered "Yes" to [9a] then:
Date of procedure**

Unknown

**9d. If answered "Yes" to [9a] then:
Time of procedure**

Unknown

**9e. If answered "Yes" to [9a] then:
Were there any complications related to the surgery?**

- Yes No Unknown

**9f. If answered "Yes" to [9a] and "Yes" to [9e] then:
What complications?**

Complications

10a. Did the patient have complications related to the rib fracture(s)?

Yes

No

Unknown

10b. If answered "Yes" to [10a] then:

What complications related to the rib fracture were recorded?

Acute on-set delirium

Surgical or chest drain complications

Respiratory failure (Type 2)

Pneumonia

Adult Respiratory Distress Syndrome

Regional analgesia complications

Respiratory failure (Type 1)

Pulmonary embolism

Ventilator associated pneumonia

Lower respiratory tract infection

Please specify any additional options here...

1a. Discharge destination

- | | |
|--|---|
| <input type="radio"/> Own home | <input type="radio"/> Supported living |
| <input type="radio"/> Residential home | <input type="radio"/> Nursing home |
| <input type="radio"/> Inpatient rehabilitation | <input type="radio"/> Transferred to another hospital |
| <input type="radio"/> Death | <input type="radio"/> Unknown |

If not listed above, please specify here...

1b. Date of discharge/death

 Unknown
1c. Time of discharge/death

 Unknown
2a. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Please make an estimation of the patient's Rockwood Clinical Frailty score on discharge
https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2022/02/rockwood-frailty-scale_.pdf

- | | | |
|---|--|---|
| <input type="radio"/> 1. Very Fit | <input type="radio"/> 2. Well | <input type="radio"/> 3. Managing Well |
| <input type="radio"/> 4. Vulnerable | <input type="radio"/> 5. Mildly Frail | <input type="radio"/> 6. Moderately Frail |
| <input type="radio"/> 7. Severely Frail | <input type="radio"/> 8. Very Severely Frail | <input type="radio"/> 9. Terminally Ill |
| <input type="radio"/> Unable to ascertain | | |

2b. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was there a new or increase in care package post-discharge?

- Yes No Unknown

3a. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was a falls risk assessment undertaken prior to discharge?

- Yes No Unknown

3b. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was a bone density scan undertaken prior to discharge?

- Yes No Unknown

Discharge letter**4a. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:**

Did the discharge letter mention rib fractures?

- Yes No Unknown

4b. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was there information for the patient on breathing exercises?

- Yes No Unknown

4c. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was there information on stopping/reducing pain killers or a limit to duration of treatment?

- Yes No Unknown

Follow up

5a. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was any follow up arranged for the patient?

Yes No Unknown

**5b. If answered "Yes" to [5a] then:
What was arranged?**

Falls clinic Thoracic clinic Screening for osteoporosis
 Physiotherapy Virtual clinic

Please specify any additional options here...

6a. If answered "Own home", "Supported living", "Residential home" or "Nursing home" to [1a] then:

Was the patient readmitted to hospital within 30 days of discharge?

Yes No Unknown

**6b. If answered "Yes" to [6a] then:
Was this related to the patient's rib fractures?**

Yes No Unknown

**6c. If answered "Yes" to [6b] then:
Please provide details (readmission)**

7a. After retrospectively reviewing this case, are there any areas regarding the management of the patient's rib fractures that you think could have been improved?

Yes No Unknown

**7b. If answered "Yes" to [7a] then:
Please provide details**

End of questionnaire

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE

By doing so you have contributed to the dataset that will form the report and recommendations due for release in Spring 2027