Pleural Procedures - Reviewer Assessment Form (update)

A. STUDY INCLUSION & CASE REVIEWER DETAILS

What is this study about?
This study will explore the patient pathway including indication for treatment, details and timing of the procedure, pre-procedure safety, consent, correct use of equipment, and complications of the procedure. Organisational data will explore staff training, out of hours and compliance with the recommendations of the two national patient safety alerts. Local incident reports and investigations will also be collected to ensure themes are identified and lessons are learned from local reporting systems.

Inclusions
Patients aged 18 and older who were admitted to hospital between 01/01/2024 and 31/12/2024 and had a chest drain inserted (OPCS code T12.0-T12.9) during their hospital stay will be included in the initial patient identification.

Trauma patients will be excluded on a case by case basis as there is a different pathway and these will be covered by the upcoming NCEPOD study on Rib fractures

Definitions
A list of definitions can be found here: http\www.ncepod.org.uk\pleural\definitions

1a. Name of Reviewer

1b. Date of Reviewer meeting

1c. Site ID
for the hospital that provided this case

1d. Was a Clinician questionnaire available for the review of this case?

○ Yes ○ No

B. PATIENT DETAILS

1. Age:
At time of admission to hospital

Years ☐ Unknown

Value should be between 18 and 115

2. Sex:

◯ Male ◯ Female ◯ Other

3. 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

4. What was the reason for this admission?
i.e. What was the condition, what symptoms did the patient present with?

Previous admissions

5a. Was this the patient's first admission where a pleural procedure/chest drain was indicated?

◯ Yes ◯ No ◯ Unable to answer

5b. If answered "No" to [5a] then:
What was the interval between the current admission and the previous admission where a pleural procedure/ chest drain was indicated/carried out?
if the patient has undergone multiple procedures, then please answer in relation tothe most recent one

◯ < 2 weeks ◯ 2 - 4 weeks ◯ 4 weeks - 3 months ◯ > 3 months
◯ Unknown

6a. In your opinion, were there any opportunities' to improve care prior to this admission?
e.g. intervention/ referral that might have prevented this admission

◯ Yes ◯ No ◯ Unable to answer

6b. If answered "Yes" to [6a] then:
***Please provide details:**

C. INITIAL CARE /DECISION-MAKING

Arrival in hospital/ initial assessment

1. Please enter the time and date of arrival in hospital:
eg arrival in the emergency department

☐ Unknown

2a. Please enter the date of the first full clinical assessment:
This does not include triage assessment

☐ Unknown

2b. Please enter the time of the first full clinical assessment:
i.e. following initial triage.

☐ Unknown

3a. What was the first ward location the patient was admitted to?

- ◯ Emergency department
- ◯ Acute medical unit
- ◯ Critical care unit
- ◯ General medical ward
- ◯ Acute surgical unit
- ◯ Respiratory ward
- ◯ Respiratory support unit
- ◯ General surgical ward
- ◯ Unable to answer

If not listed above, please specify here...

3b. In your opinion, was this the correct initial location to be admitted to?

◯ Yes ◯ No ◯ Unable to answer

4a. Was there a delay in the initial assessment?

◯ Yes ◯ No ◯ Unable to answer

4b. If answered "Yes" to [4a] then:
Please provide details of delay in initial assessment

5a. Did the patient require supplemental oxygen pre-procedure?

◯ Yes ◯ No ◯ Unable to answer

5b. If answered "Yes" to [5a] then:
Please provide details (supplemental Oxygen):

Diagnostic imaging prior to the procedure

6a. Was there any imaging undertaken for diagnostic purposes prior to the pleural procedure being carried out (I.E. NOT DURING THE PROCEDURE)?
Please note, there are separate questions regarding peri-procedural imaging in section D

◯ Yes ◯ No ◯ Unable to answer

6b. If answered "Yes" to [6a] then:
Please indicate any diagnostic imaging that was performed pre-procedure:
Answers may be multiple, please select all that apply.

☐ Chest X-Ray ☐ CT chest ☐ Ultrasound scan (USS)
☐ None ☐ Unknown

Please specify any additional options here...

6c. If answered "No" to [6a] then:
If no imaging was performed, in your opinion, should there have been?

◯ Yes ◯ No ◯ Unable to answer

7. If answered "Ultrasound scan (USS)" to [6b] then:
Was the ultrasound scan:

◯ Carried out at point of care (POCUS)
◯ Carried out using the Radiology departmental ultrasound
◯ Unable to answer

If not listed above, please specify here...

8. If answered "Yes" to [6a] then:
Was all imaging formally reported prior to the pleural procedure taking place?

◯ Yes ◯ No ◯ Unable to answer

9a. In your opinion, could anything have been improved regarding pre-procedure imaging?

◯ Yes ◯ No ◯ Unable to answer

9b. If answered "Yes" to [9a] then:
Please provide details:

10a. In your opinion, were all necessary investigations carried out?

◯ Yes ◯ No ◯ Unable to answer

10b. If answered "No" to [10a] then:
Please provide details of investigations not carried out that should have been

11a. In your opinion, was the right information captured prior to the procedure?

◯ Yes ◯ No ◯ Unable to answer

11b. If answered "No" to [11a] then:
If no, please provide details of what was missing

Decision-making

12a. When was the decision made to carry out the pleural procedure / insert a chest drain made?

☐ Unknown

12b. In your opinion, was there a delay in making the decision to carry out the pleural procedure/ insert a chest drain?

◯ Yes ◯ No ◯ Unable to answer

13. What was the location of the patient when the decision was made to carry out a pleural procedure/ insert a chest drain?

◯ Emergency department ◯ Acute medical unit ◯ Critical care unit
◯ General ward ◯ Outpatient department ◯ Respiratory ward
◯ Respiratory support unit

If not listed above, please specify here...

14a. In your opinion, was the grade/ specialty of clinician making the decision appropriate?

◯ Yes ◯ No ◯ Unable to answer

14b. If answered "No" to [14a] then:
Please give details as to why the grade or specialty of the clinician making the decision was not appropriate:

15. Did the clinician who made the decision review the patient?

◯ Yes, in person ◯ Yes, remotely ◯ No ◯ Unknown

If not listed above, please specify here...

16a. Was advice sought from another clinician regarding the decision to carry out the pleural procedure / insert the chest drain?

◯ Yes ◯ No ◯ Unable to answer

16b. If answered "Yes" or "No" to [16a] then:
In your opinion, should the clinician making the decision have sought advice?
Please answer this question whether or not the clinician sought advice

◯ Yes ◯ No ◯ Unable to answer

17a. If answered "Yes" to [16a] then:
What was the specialty of the advising clinician

◯ Emergency medicine
◯ General medicine
◯ Intensive/critical care medicine
◯ General surgery
◯ Respiratory/Pleural nursing
◯ Unknown
◯ Acute medicine
◯ Respiratory medicine
◯ Interventional radiology
◯ Anaesthesia
◯ Other Nursing

If not listed above, please specify here...

17b. If answered "Yes" to [16a] then:
What was the grade of the advising clinician

◯ ST3-5 ◯ ST6-8 ◯ Consultant ◯ Unknown

If not listed above, please specify here...

17c. If answered "Yes" to [16a] then:
Did the advising clinician review the patient?

◯ Yes, in person ◯ Yes, remotely ◯ No ◯ Unknown

If not listed above, please specify here...

18. What was the indication for chest drain insertion

◯ Pleural effusion ◯ Pneumothorax ◯ Pleural infection ◯ Unknkown

If not listed above, please specify here...

19. If answered "Pneumothorax" to [18] then:
What was the category of pneumothorax?

◯ Primary spontaneous pneumothorax ◯ Secondary spontaneous pneumothorax

If not listed above, please specify here...

20. If answered "Pleural infection" to [18] then:
Was the infection:

◯ Secondary to pneumonia ◯ Secondary to abdominal infection
◯ Unknown source of infection

If not listed above, please specify here...

21. If answered "Pleural effusion" to [18] then:
For pleural effusion, what was the underlying cause?

☐ Lung cancer ☐ Other cancer ☐ Heart failure ☐ Liver disease
☐ Renal failure ☐ Autoimmune disease ☐ Intestinal disease ☐ Unknown

Please specify any additional options here...

22a. Was the level of urgency for the pleural procedure/ chest drain recorded in the notes?

◯ Yes ◯ No ◯ Unable to answer

22b. If answered "Yes" to [22a] then:
What was the level urgency of the pleural procedure/ drain insertion recorded as?

◯ Emergency ◯ Urgent ◯ Non-urgent ◯ Unknown

22c. If answered "Emergency", "Urgent" or "Non-urgent" to [22b] then:
In your opinion, was the recorded urgency accurate?

◯ Yes ◯ No ◯ Unable to answer

23a. Please select the statement that best describes the timing of the pleural procedure / chest drain insertion:

◯ The procedure should have been planned for an earlier time/date
◯ the procedure should have been delayed until a later time/date
◯ The procedure was planned with appropriate timing/urgency
◯ Unable to answer

If not listed above, please specify here...

23b. If answered "The procedure should have been planned for an earlier time/date" to [23a] then:
Please provide details of the reason why the procedure was delayed:

23c. If answered "the procedure should have been delayed until a later time/date" to [23a] then:
Please provide details of why the procedure should have been delayed:

24a. In your opinion, was the choice of pleural procedure / chest drain insertion appropriate?
Or could an alternative, less invasive approach have been used

- ◯ Yes - this pleural procedure/ chest drain insertion was appropriate
- ◯ No- an alternative approach could have been used
- ◯ Unable to answer

If not listed above, please specify here...

24b. If answered "No- an alternative approach could have been used" to [24a] then:
Please provide details:

24c. If answered "No- an alternative approach could have been used" to [24a] then:
In your opinion, did this impact the overall quality of care received by this patient?

◯ Yes ◯ No ◯ Unable to answer

24d. If answered "Yes" to [24c] then:
Please provide details:

D. PERI-PROCEDURE CARE

1. Which pleural procedure was performed?
please select 1 answer that described the first/ primary pleural procedure performed

- ◯ Drainage of lesion of pleura (T12.1)
- ◯ Drainage of pleural cavity (T12.2)
- ◯ Aspiration of pleural cavity (T12.3)
- ◯ Insertion of tube drain into pleural cavity (T12.4)
- ◯ Attention to tube drain into pleural cavity (T12.5)
- ◯ Insertion of tunnelled catheter into pleural cavity (T12.6)
- ◯ Attention to tunnelled catheter in pleural cavity (T12.7)
- ◯ Unknown

If not listed above, please specify here...

2a. What was the date the pleural procedure was carried out/ the chest drain was inserted?

☐ Not Applicable ☐ Unknown

2b. What was the time the pleural procedure was carried out/ chest drain was inserted

☐ Not Applicable ☐ Unknown

3a. Once the decision had been made to carry out a pleural procedure/ insert a chest drain, were there any further delays in carrying out the procedure?

◯ Yes ◯ No ◯ Unable to answer

3b. If answered "Yes" to [3a] then:
Please provide details of the delay:

Consent

4a. How was consent taken?

- ◯ Written consent form
- ◯ Verbal consent documented in the notes
- ◯ "Best Interest" form (Form 4) or equivalent
- ◯ Written on notes, "patient lacks capacity- in best interest" (or equivalent)
- ◯ N/A- consent not documented

If not listed above, please specify here...

4b. If answered "Written consent form" or ""Best Interest" form (Form 4) or equivalent" to [4a] then:
Was a consent form used that was specific for pleural procedures/ chest drains?

◯ Yes ◯ No ◯ Unable to answer

4c. If answered "Written consent form" or ""Best Interest" form (Form 4) or equivalent" to [4a] then:
Were all relevant potential complications listed on the consent form?

◯ Yes ◯ No ◯ Unable to answer

4d. If answered "No" to [4c] then:
What was missing?

4e. After your review of the case notes, in your opinion could the consent process have been improved?

◯ Yes ◯ No ◯ Unable to answer

4f. If answered "Yes" to [4e] then:
Please provide details of where improvements could be made

Location

5a. Was the patient transferred to a new location prior to the procedure?

◯ Yes ◯ No ◯ Unable to answer

5b. If answered "Yes" to [5a] then:
In your opinion, was this necessary?

◯ Yes ◯ No ◯ Unable to answer

5c. If answered "Yes" or "No" to [5b] then:
Please explain your answer:

Procedural operator

6a. What was the grade of the operating clinician?

◯ Nurse Specialist (consultant / ACP/etc.)
◯ Consultant
◯ Specialist/ Associate specialist (SAS) grade
◯ Senior Clinical Fellow
◯ Senior Resident/ Specialist Trainee (ST6/ST7/ST8 or equivalent)
◯ Resident/ Specialist Trainee (ST3-5 or equivalent)
◯ Resident doctor (below ST3 or equivalent)
◯ Unknown

If not listed above, please specify here...

6b. What was the specialty of the procedural operating clinician?

- ◯ Respiratory medicine
- ◯ Emergency medicine
- ◯ Interventional radiology
- ◯ Anaesthesia
- ◯ Respitatory nursing
- ◯ Unknown
- ◯ Intensive/critical care medicine
- ◯ General medicine
- ◯ Pleural nursing
- ◯ General surgery
- ◯ Acute medicine

If not listed above, please specify here...

6c. In your opinion, was the grade/ specialty of the operating clinician appropriate?

- ◯ Yes
- ◯ No
- ◯ Unable to answer

6d. If answered "No" to [6c] then:
Please give details of why:

7a. In your opinion, was the grade/ specialty of the assisting clinician appropriate?

- ◯ Yes
- ◯ Unable to answer
- ◯ No
- ◯ Not applicable- no assistance documented

If not listed above, please specify here...

7b. Was the procedure appropriately supervised?

- ◯ Yes
- ◯ No
- ◯ Unable to answer
- ◯ Not applicable - not required

7c. If answered "No" to [7b] then:
Please explain why the supervision was not appropriate:

8a. In your opinion, was there adequate nursing support for the procedure?

- ◯ Yes
- ◯ No
- ◯ Unable to answer

8b. If answered "No" to [8a] then:
If No, please provide details (missing nursing support):

Pre-/peri-operative assessment/analysis

9a. Was a procedure safety checklist included in the records?

- ◯ Yes
- ◯ No
- ◯ Unknown

9b. If answered "Yes" to [9a] then:
Did it include all relevant safety standards?
Do we need to include a list?

◯ Yes ◯ No ◯ Unknown

9c. If answered "No" to [9b] then:
What was missing?

10a. Were all appropriate pre-procedure assessments/investigations done?

◯ Yes ◯ No ◯ Unable to answer

10b. If answered "No" to [10a] then:
Which additional tests should have been done?

☐ Full blood count ☐ Urea & Electrolytes ☐ INR test ☐ Chest X-Ray
☐ CT chest ☐ Ultrasound scan ☐ Unknown

Please specify any additional options here...

11a. Which of the following additional risk factors were present pre-procedure:

☐ Anti-coagulants ☐ Anti-platelet agents ☐ Other coagulopathy
☐ Low platelets ☐ None ☐ Unknown

Please specify any additional options here...

11b. If answered "Anti-coagulants", "Anti-platelet agents", "Other coagulopathy" or "Low platelets" to [11a] then:
Were these managed appropriately?

◯ Yes ◯ No ◯ Unable to answer

11c. If answered "No" to [11b] then:
Please provide details:

12a. Were all appropriate samples sent at the time of drain insertion?

◯ Yes ◯ No ◯ Unable to answer ◯ Not applicable

12b. If answered "No" to [12a] then:
If no, please explain your answer

Ultrasound guidance

13a. Was ultrasound used to guide the procedure?

- ◯ Yes
- ◯ No
- ◯ Unclear from notes
- ◯ Not applicable (pneumothorax)

13b. If answered "Yes" to [13a] then:
If yes, how was ultrasound carried out?

- ◯ During/immediately prior to procedure
- ◯ Site marked pre-procedure (e.g. in Radiology department)
- ◯ Unable to answer

If not listed above, please specify here...

13c. If answered "No" to [13a] then:
If no, should ultrasound have been used?

- ◯ Yes
- ◯ No
- ◯ Unable to answer

14. If answered "Yes" to [13a] then:
Was the operator for the procedure the same as the ultrasound operator?

- ◯ Yes
- ◯ No
- ◯ Unknown

15a. If answered "No" to [14] then:
Ultrasound operator - specialty

- ◯ Respiratory medicine
- ◯ Acute medicine
- ◯ General medicine
- ◯ Radiology
- ◯ Anaesthesia
- ◯ General surgery
- ◯ Unknown
- ◯ Intensive / critical care medicine
- ◯ Emergency medicine
- ◯ Interventional radiology
- ◯ Pleural nursing
- ◯ Radiographer
- ◯ Other nursing

If not listed above, please specify here...

15b. If answered "No" to [14] then:
Ultrasound operator- grade

- ◯ Consultant
- ◯ Resident trainee doctor: ST6-8
- ◯ Nurse specialist (AFC band 7-8)
- ◯ Unknown
- ◯ Resident/ trainee doctor: ST3-5
- ◯ Nurse specialist (Other AFC band)
- ◯ Radiographer (AFC band 6-8)

If not listed above, please specify here...

16a. If answered "No" to [14] then:
If not the same person, did the operating clinician have access to the US findings?

- ◯ Yes
- ◯ No
- ◯ Unknown

16b. If answered "No" to [16a] then:
If not, please give details

Drain insertion/ drain position

17a. Was any procedural difficulty/ variation from standard techniques documented?
e.g. which might include multiple attempts or non-standard drain position

◯ Yes ◯ No ◯ Unable to answer

17b. If answered "Yes" to [17a] then:
Please provide details:

18a. Was the drain insertion technique appropriate?
i.e Seldinger versus blunt dissection

◯ Yes ◯ No ◯ Unable to answer

18b. If answered "No" to [18a] then:
Please provide details (technique)

19a. Was the drain secured appropriately?

◯ Yes ◯ No ◯ Unable to answer

19b. If answered "No" to [19a] then:
Please provide details (secure drain):

20a. Was the site/position of drain correct?

◯ Yes ◯ No ◯ Unable to answer

20b. If answered "No" to [20a] then:
If position not appropriate, was the drain repositioned?

◯ Yes ◯ No
◯ N/A - drain in appropriate position ◯ Unable to answer

20c. If answered "Yes" to [20b] then:
Was this successful?

◯ Yes ◯ No ◯ Unable to answer

Anaesthesia/ pain management

21a. Was it documented that the patient was in pain during the procedure?

◯ Yes ◯ No ◯ Unable to answer

21b. If answered "Yes" to [21a] then:
Please provide details (anaesthesia)

21c. What analgesia did the patient receive?

☐ Local anaesthetic ☐ Opioids eg codeine ☐ NSAIDs ☐ Paracetamol
☐ Unknown

Please specify any additional options here...

22a. Was there room for improvement in any aspect of pain management / analgesia during the procedure?

◯ Yes ◯ No ◯ Unable to answer

22b. If answered "Yes" to [22a] then:
Please provide details (pain management)

23a. Is there evidence that a specialised pleural service was involved in the periprocedural care of this patient?

◯ Yes ◯ No ◯ Unable to answer

23b. If answered "No" to [23a] then:
If not, in your opinion, could the patient have benefited from this?

◯ Yes ◯ No ◯ Unable to answer

23c. If answered "Yes" to [23b] then:
If yes, please explain how:

24a. Is there any evidence that the patient's periprocedural care was managed using a specialised pleural procedures/ chest drain protocol/ pathway/ proforma?

◯ Yes ◯ No ◯ Unable to answer

24b. If answered "Yes" to [24a] then:
Please provide details (proforma/ pathway)

E. POST-PROCEDURE CARE

1a. Where was immediate post-procedural care provided?

- ◯ Emergency Department
- ◯ AMU
- ◯ Critical care unit
- ◯ Respiratory support unit
- ◯ Specialist respiratory ward
- ◯ General ward
- ◯ Acute respiratory care unit
- ◯ Unknown

If not listed above, please specify here...

1b. In your opinion, was the immediate post-procedure location appropriate?

- ◯ Yes
- ◯ No
- ◯ Unable to answer

2a. Was ward transfer required for chest drain care after chest drain insertion?

- ◯ Yes
- ◯ No
- ◯ Unknown

2b. If answered "Yes" to [2a] then:
If yes, where was the patient transferred to?

- ◯ ED
- ◯ AMU
- ◯ Critical care unit
- ◯ Respiratory support unit
- ◯ Specialist respiratory ward
- ◯ General ward

If not listed above, please specify here...

2c. If answered "Yes" to [2a] then:
Was ward appropriate for chest drain management after insertion?

- ◯ Yes
- ◯ No
- ◯ Unable to answer

2d. If answered "No" to [2c] then:
Please explain:

3a. Was a post-procedure plan documented ?

- ◯ Yes
- ◯ No
- ◯ Unknown

3b. If answered "Yes" to [3a] then:
What was included in the post-procedure plan:
Answers may be multiple, please select all that apply:

- ☐ Drainage targets
- ☐ Flush
- ☐ Analgesia/ pain management
- ☐ Chest X-Ray
- ☐ Vital signs monitoring
- ☐ Unknown

Please specify any additional options here...

4a. How long was the drain in place?
Round up to number of whole days

days

4b. Was this an appropriate length of time?

- ◯ Yes
- ◯ No
- ◯ Unable to answer

4c. If answered "No" to [4b] then:
***Please explain why:**

5. Reason for drain removal?

◯ Drain no longer required

If not listed above, please specify here...

6a. Was the drain clamped at any stage after insertion?

◯ Yes ◯ No ◯ Unknown

6b. If answered "Yes" to [6a] then:
If yes, date and time first clamped:

☐ Not Applicable ☐ Unknown

7. How many times per day was a drain flush prescribed?
If none prescribed, tick 'not applicable'

☐ Not Applicable

8. Was the drain site checked (for signs of bleeding, infection, leakage) at least daily while in place?

◯ Yes ◯ No ◯ Unknown

9a. Which analgesics were administered post-procedure:

☐ NSAIDS ☐ Paracetamol ☐ Opiods ☐ Not Recorded

Please specify any additional options here...

9b. In your opinion, was analgesia administered appropriately post-operatively?

◯ Yes ◯ No ◯ Unknown

10. Was a pain score used?

◯ Yes ◯ No ◯ Unknown

11a. Was the pain team involved in the patient's care post-operatively?

◯ Yes ◯ No ◯ Unknown

11b. If answered "No" to [11a] then:
In your opinion, should the pain team have been involved?

◯ Yes ◯ No ◯ Unable to answer

12a. Did the drain become dislodged at any time?

◯ Yes ◯ No ◯ Unable to answer

12b. If answered "Yes" to [12a] then:
Please provide details (drain dislodged)

12c. If answered "Yes" to [12a] then:
Was this managed appropriately?

◯ Yes ◯ No ◯ Unable to answer

13a. In your opinion, was there any room for improvement in the nursing care provided post-procedure?

◯ Yes ◯ No ◯ Unable to answer

13b. If answered "Yes" to [13a] then:
Please provide details:

14a. In your opinion, was there any room for improvement in the medical decision making post-procedure?

◯ Yes ◯ No ◯ Unable to answer

14b. If answered "Yes" to [14a] then:
Please provide details (improvement in medical decision-making)

F. SUBSEQUENT PLEURAL PROCEDURES

1a. Did this patient have any subsequent drain insertions/ pleural procedures during this admission?

◯ Yes ◯ No ◯ Unable to answer

1b. If answered "Yes" to [1a] then:
How many additional times did an pleural procedure take place during the admission?

☐ Not Applicable ☐ Unknown

Value should be no more than 100

If multiple additional procedures took place, please choose the one drain insertion from which the most learning is possible
(in order to answer the following questions in this section)

2. If answered "Yes" to [1a] then:
Which subsequent pleural procedure was performed?
If there were multiple pleural procedures performed, please select the please choose the one drain insertion from which the most learning is possible

◯ Drainage of lesion of pleura (T12.1)
◯ Drainage of pleural cavity (T12.2)
◯ Aspiration of pleural cavity (T12.3)
◯ Insertion of tube drain into pleural cavity (T12.4)
◯ Attention to tube drain into pleural cavity (T12.5)
◯ Insertion of tunneled catheter into pleural cavity (T12.6)
◯ Attention to tunneled catheter in pleural cavity (T12.7)
◯ Unknown

If not listed above, please specify here...

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3. If answered "Yes" to [1a] then:
What was the date and time of the additional pleural procedure?

☐ Unknown

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4. If answered "Yes" to [1a] then:
What was the location of the additional pleural procedure?

◯ Emergency department ◯ General medical ward ◯ Surgical ward
◯ Critical care (ICU/HDU) ◯ Respiratory support unit ◯ Specialist respiratory ward
◯ Unknown

If not listed above, please specify here...

5a. If answered "Yes" to [1a] then:
Who was the operating clinician for the additional pleural procedure

◯ Consultant ◯ Senior Resident/ Trainee (ST7-8)
◯ Resident / Trainee (ST6-7) ◯ Consultant nurse specialist (AFC band 7-8)
◯ Other nurse specialist

If not listed above, please specify here...

5b. If answered "Yes" to [1a] then:
What was the specialty of the operating clinician for the additional pleural procedure

- ◯ Emergency medicine
- ◯ Acute medicine
- ◯ Respiratory medicine
- ◯ Critical care
- ◯ General surgery

If not listed above, please specify here...

6. If answered "Yes" to [1a] then:
Was Ultrasound guidance used for this procedure

- ◯ Yes
- ◯ No
- ◯ Unknown

7a. If answered "Yes" to [1a] then:
Regarding the additional pleural procedure that took place, please list any areas for improvement:

- ☐ Pre-operative investigations
- ☐ Consent
- ☐ Anaesthesia
- ☐ The drain insertion
- ☐ Securing the drain
- ☐ Complications of the procedure

Please specify any additional options here...

7b. If answered "Pre-operative investigations", "Consent", "Anaesthesia", "The drain insertion", "Securing the drain" or "Complications of the procedure" to [7a] then:
Please expand on your answer(s) in the space provided:

G. COMPLICATIONS/DISCHARGE/REVIEW

Complications

1a. Were there any pleural procedure/chest drain related complications?

◯ Yes ◯ No ◯ Unknown

1b. If answered "Yes" to [1a] then:
If yes, were these complications

◯ Immediate (within 4 hours) ◯ Delayed (> 4 hours) ◯ Both
◯ Unknown

1c. If answered "Yes" to [1a] then:
If yes, which of the following complications were known?
Answers may be multiple. Please select all that apply.

- ☐ Incorrect site
- ☐ Re-expansion pulmonary oedema
- ☐ Pneumothorax
- ☐ Infection
- ☐ Inappropriate clamping
- ☐ Patient discomfort (persistent cough)
- ☐ Haemorrhage/ bleeding
- ☐ Displaced drain
- ☐ Organ puncture
- ☐ Shock
- ☐ Surgical emphysema
- ☐ Disconnection
- ☐ Accidental drain removal
- ☐ Patient discomfort (persistent pain)
- ☐ Significant haemorrhage/ bleeding
- ☐ Unknown

Please specify any additional options here...

1d. If answered "Yes" to [1a] then:
In your opinion, Should any of these complications been reported using an incident reporting system eg. DATIX?

◯ Yes ◯ No ◯ Unknown

1e. If answered "Yes" to [1d] then:
If Yes, were they reported?

◯ Yes ◯ No ◯ Unknown

1f. If answered "Yes" to [1a] then:
Did the patient suffer "harm" from the complication?

◯ Yes ◯ No ◯ Unknown

1g. If answered "Yes" to [1f] then:
Please provide details:
Including the key points of the investigation / report and any learning that resulted

2a. If answered "Yes" to [1a] then:
Were all drain related complications dealt with appropriately?

◯ Yes ◯ No ◯ Unable to answer

2b. If answered "No" to [2a] then:
If no, please explain

Drain removal

3. What was the date and time drain removed:

☐ Not Applicable ☐ Unknown

4. Was drain removal:

◯ Planned ◯ Unplanned (e.g. fell out) ◯ Not applicable

5a. Were there any complications of drain removal?

◯ Yes ◯ No ◯ Unknown ◯ N/A

5b. If answered "Yes" to [5a] then:
If yes, please explain

5c. Did the drain need to be reinserted?
At any time during the admission

◯ Yes ◯ No ◯ Unknown

5d. If answered "Yes" to [5c] then:
When was the drain re-inserted?

☐ Not Applicable ☐ Unknown

Incident reporting

6a. Was an incident reported in relation to this case?

◯ Yes ◯ No ◯ Unknown

6b. If answered "Yes" to [6a] then:
If yes, was this related to the chest drain?

◯ Yes ◯ No ◯ Unknown

7. If answered "Yes" to [6a] then:
Are the details of the incident report included in the case note extracts?

◯ Yes ◯ No

8. If answered "Yes" to [6a] and "Yes" to [7] then:
In your opinion, were all appropriate actions taken as a result of the investigation?

◯ Yes ◯ No ◯ Unable to answer

9a. In your opinion are there any additional lessons that can be learned from this case?
After review of the case notes, the reported incident, and the investigating manager's response (if you have access to this)

◯ Yes ◯ No ◯ Unknown

9b. If answered "Yes" to [9a] then:
If yes, please explain:

10a. Did any incident / harm occur that was not reported?
At any time during the admission

◯ Yes ◯ No ◯ Unknown

10b. If answered "Yes" to [10a] then:
Please provide details:
Including the key points of the investigation / report and any learning that resulted

Discharge/ outcome

10c. Did the patient survive to discharge?

◯ Yes ◯ No ◯ Unable to answer

10d. If answered "Yes" to [10c] then:
What was the discharge destination for this patient?

◯ Usual residence ◯ Other hospital ◯ Hospice
◯ Sheltered accommodation

If not listed above, please specify here...

11a. Was the Pleural Specialist Team involved in the care of this patient at any point prior to discharge?

◯ Yes ◯ No ◯ Unable to answer

11b. If answered "No" to [11a] then:
In your opinion, should they have been involved?

◯ Yes ◯ No ◯ Unable to answer

11c. If answered "Yes" to [11a] then:
If YES, was there any room for improvement in their involvement?

◯ Yes ◯ No ◯ Unable to answer

11d. If answered "Yes" to [11c] then:
Please provide details of improvement:

12. If answered "Yes" to [10c] then:
Did this patient die within 30 days of discharge from hospital?

◯ Yes ◯ No ◯ Unknown

13a. If the patient died , what was the primary cause of death?
Please list 1a cause of death If not applicable please leave blank

13b. If the patient died, was there any possible link to the periprocedural care provided at the time of chest drain insertion?

◯ Yes ◯ No ◯ Unknown ◯ Not applicable

13c. If answered "Yes" to [13b] then:
Please provide details:

Readmission to hopsital
(within 30 days)

14a. If answered "Yes" to [10c] then:
Was the patient readmitted to hospital within 30 days of discharge?
Including the key points of the investigation / report and any learning that resulted

◯ Yes ◯ No ◯ Unknown

14b. If answered "Yes" to [14a] then:
Was the reason for readmission related to the pleural procedure?
After review of the case notes, the reported incident, and the investigating manager's response (if you have access to this)

◯ Yes ◯ No ◯ Unknown

Follow up appointment

14c. If answered "Yes" to [10c] then:
Was a follow up appointment planned for this patient

◯ Yes ◯ No ◯ Unable to answer

14d. If answered "No" to [14c] then:
If no follow up appointment, should there have been in your opinion?

◯ Yes ◯ No ◯ Unable to answer

14e. If answered "Yes" to [14c] then:
Was there room for improvement in the follow up of this patient?

◯ Yes ◯ No ◯ Unable to answer

H. OVERALL QUALITY OF CARE

OVERALL QUALITY OF CARE RATING

GOOD PRACTICE: A standard that you would accept from yourself, your trainees and your institution ROOM FOR IMPROVEMENT: Aspects of CLINICAL care that could have been better ROOM FOR IMPROVEMENT: Aspects of ORGANISATIONAL care that could have been better ROOM FOR IMPROVEMENT: Aspects of CLINICAL AND ORGANISATIONAL care that could have been better LESS THAN SATISFACTORY: Several aspects of clinical and/or organisational care that were well below that you would accept from yourself, your trainees and your institution. INSUFFICIENT DATA: Insufficient information submitted to NCEPOD to assess the quality of care

1a. Please rate the overall quality of care using the grading system provided:

- ◯ Good Practice
- ◯ Room for improvement (Clinical aspects of care)
- ◯ Room for improvement (Organisational aspects of care)
- ◯ Room for improvement (Clinical & Organisational aspects of care)
- ◯ Less than satisfactory
- ◯ Insufficient data

1b. If answered "Good Practice", "Room for improvement (Clinical aspects of care)", "Room for improvement (Organisational aspects of care)", "Room for improvement (Clinical & Organisational aspects of care)" or "Less than satisfactory" to [1a] then:
Please provide reasons for this grade:

2a. Are there any themes/ issues from this case that you feel should be highlighted in the final report?

◯ Yes ◯ No

2b. If answered "Yes" to [2a] then:
Please expand on your answer (illustrative vignette)

Cause for concern

Occasionally NCEPOD will refer cases that have been identified as 'LESS THAN SATISFACTORY' when it is felt that further feedback to the Trust/ Health Board concerned is warranted. This is usually due to an area of concern to the hospital or clinician involved, and not for issues highlighted across the body of case notes. This process has been agreed by the NCEPOD Steering Group and the GMC. The medical director of the Trust/ Health Board is written to by the Chief Executive of NCEPOD explaining our concerns. This process

has been in operation for 10 years and the responses received have always been positive

3. Do you feel that this case should be considered for such action?

◯ Yes ◯ No

Health inequalities

4a. During review of this case did you notice any evidence of one or more health inequality or bias that impacted on the care provided?

◯ Yes ◯ No ◯ Unable to answer

4b. If answered "Yes" to [4a] then:
What health inequalities exist in relation to this patient?

- ☐ Age
- ☐ Disabilty - physical
- ☐ Sex
- ☐ Religion
- ☐ Socio-economic status
- ☐ Mental health condition
- ☐ Disability - learning/ cognitive
- ☐ Gender reassignment
- ☐ Ethnicity
- ☐ Sexual Orientation
- ☐ English not first language

Please specify any additional options here...

4c. If answered "Yes" to [4a] then:
Please provide details on how the health inequalities impacted on the care received