

Pleural Procedures - Organisational Questionnaire

A. A. INTRODUCTION

What is this study about?

Pleural procedures (especially chest drain insertion) have been associated with patient safety incidents frequently enough to have been the subject of a first patient safety alert in 2008, which set out best practice for chest drain insertion. It also highlighted the importance of learning from local incident reporting data.

However, recent evidence suggests that little has changed to reduce the number of patients harmed due to chest drain insertion with concerns also being raised regarding the training and experience of those tasked to deal with emergency out of hours pleural interventions. Urgent and emergency procedures performed out of hours are often done in the most complex and high-risk patients but are more likely to be done by less experienced staff.

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 arrangements 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

Inclusions

Please complete a questionnaire for each separate hospital site that has participated in the case review for this study. I.e. hospitals where pleural procedures take place

Who should complete this questionnaire?

This questionnaire should be completed by the Local Reporter with the aid of the pleural lead or someone who has oversight of the delivery of pleural procedures within the hospital

Questions or help

Further information regarding this study can be found here: <https://www.ncepod.org.uk/pleural.html>

If you have any queries about this study or this questionnaire, please contact: pleural@ncepod.org.uk or telephone 0207 251 9060.

About NCEPOD

The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) reviews healthcare practice by undertaking confidential studies, and make 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 the Offshore Islands. 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

Hospital details**1. How many inpatient beds are there at this hospital site?**

- <100
 100-500
 501-1000
 >1000

If not listed above, please specify here...

2. Does this hospital have an Emergency Department?

- Yes - 24/7
 Yes - but not 24/7
 No Emergency Department at this hospital

3. Please describe the critical care facilities at this hospital:

Please select the statement that best describes the facilities at this hospital

- Level 2/3 care available (eg HDU/ICU)
 Level 2 care available (eg HDU, no level 3/ICU)
 No higher level/critical care available (Level 0/1 only)

If not listed above, please specify here...

4. Does this hospital have a same day emergency care (SDEC) unit?

- Yes
 No
 Unknown

5. Does this hospital have cardiothoracic surgery department on site?

- Yes
 No
 Unknown

Pleural Services**6a. Does this hospital* have a dedicated Pleural service?**

Trust or Healthboard

- Yes
 No
 Unknown

6b. If answered "Yes" to [6a] then:

How many consultants provide the pleural service?

consultants
 Unknown

7. Does this hospital* have a designated clinical lead responsible for pleural procedures?

Trust or healthboard

- Yes
 No
 Unknown

8. If answered "Yes" to [6a] then:

For how many hours per week is the Pleural Service available for chest drain insertion?

Out of a possible 168 hours

hours
 Not Applicable
 Unknown

Value should be no more than 168

9a. 1 When the pleural service is not available, who has responsibility for chest drain insertion for A) PLEURAL EFFUSION IN ACUTE/ EMERGENCY MEDICINE

NB. this includes hospitals where there is no pleural service; please include all grades and specialties

9b. When the pleural service is not available, who has responsibility for chest drain insertion for B) PNEUMOTHORAX IN ACUTE/ EMERGENCY MEDICINE

NB this includes hospitals where there is no pleural service; please include all grades and specialties

9c. When the pleural service is not available, who has responsibility for chest drain insertion for C) PLEURAL EFFUSION IN CRITICAL CARE

NB. this includes hospitals where there is no pleural service; please include all grades and specialties

9d. When the pleural service is not available, who has responsibility for chest drain insertion for D) PNEUMOTHORAX IN CRITICAL CARE

NB. this includes hospitals where there is no pleural service; please include all grades and specialties

10. Please select the locations in which chest drain insertion/ pleural procedures take place?

- | | |
|--|---|
| <input type="checkbox"/> Emergency department | <input type="checkbox"/> General ward |
| <input type="checkbox"/> Respiratory ward | <input type="checkbox"/> Intensive care area/unit |
| <input type="checkbox"/> Procedure room | <input type="checkbox"/> Operating theatre |
| <input type="checkbox"/> Trauma ward | <input type="checkbox"/> Medical admissions unit |
| <input type="checkbox"/> Same day emergency care unit (SDEC) | |

Please specify any additional options here...

11a. Are the hospital locations where chest drains can be inserted more limited outside of regular working hours?

however "regular working hours" is defined locally

- Yes No Unknown

11b. If answered "Yes" to [11a] then:

Please provide details:

12a. Does there exist a register of staff in the hospital who are competent in chest drain insertion?

- Yes No Unknown

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

Please select all the departments that have an accessible register of staff competent in chest drain insertion:

Answers may be multiple, please select all that apply.

- | | | |
|---|---|---|
| <input type="checkbox"/> Emergency department | <input type="checkbox"/> Acute medicine | <input type="checkbox"/> General medicine |
| <input type="checkbox"/> General surgery | <input type="checkbox"/> Cardiothoracic surgery | <input type="checkbox"/> Respiratory medicine |
| <input type="checkbox"/> Critical care | <input type="checkbox"/> SDEC unit | <input type="checkbox"/> Trauma care |
| <input type="checkbox"/> None of these | | |

Please specify any additional options here...

13a. Is the competency recorded of residents who rotate from other hospitals?

- Yes No Unknown

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

How is the competency of residents who rotate from other hospitals recorded?

14a. Are staff rotas drawn up that ensure that there is a competent pleural practitioner available 24/7?

- Yes No Unknown

14b.If answered "Yes" to [14a] then:

To which areas of the hospital does this apply?

Answers may be multiple, please select all that apply

- | | | |
|---|--|---|
| <input type="checkbox"/> General medical wards | <input type="checkbox"/> Respiratory wards | <input type="checkbox"/> General surgical wards |
| <input type="checkbox"/> Specialist medical wards | <input type="checkbox"/> Specialist surgical wards | <input type="checkbox"/> Emergency department |
| <input type="checkbox"/> Acute medical unit | <input type="checkbox"/> Critical care | |

Please specify any additional options here...

Equipment and resources

15. Does this hospital have "pleural procedure packs" or equivalent, in areas of the hospital where pleural procedures are undertaken?

Sterile, all-in-one kits designed for safely draining fluid or air from the pleural space containing e.g containing a vacuum bottle/drainage bag, sterile gloves, dressings, cleaning swabs, and a valve cap,

- Yes No Unknown

16a.Is there access to an ultrasound machine in every area where chest drains are inserted?

- Yes No

16b.If answered "No" to [16a] then:

Please select areas where US machines are not readily available where a chest drain may be inserted:

Answers may be multiple, please select all that apply

- | | | |
|--|--|---|
| <input type="checkbox"/> Emergency department | <input type="checkbox"/> Acute medical unit | <input type="checkbox"/> General medical ward |
| <input type="checkbox"/> General surgical ward | <input type="checkbox"/> Specialist medical ward | <input type="checkbox"/> Specialist surgical ward |
| <input type="checkbox"/> High dependency unit | <input type="checkbox"/> Intensive care unit | |

Please specify any additional options here...

17. Is equipment required for pleural procedures organised so that it is readily accessible?

- Yes No Unknown

18a.Is there a system in place to provide replacement equipment in the event of chest drain equipment malfunction/ failure?

- Yes No Unknown

18b.If answered "Yes" to [18a] then:

Please give details:

1a. Is there a competency training program in your hospital for clinicians performing chest drain insertions?

- Yes No Unknown

1b. If answered "Yes" to [1a] then:**Which specialties receive this training?***Answers may be multiple, please select all that apply*

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

Please specify any additional options here...

1c. If answered "Yes" to [1a] then:**Which of the following grades of clinician undergo this training?***Answers may be multiple, please select all that apply*

- F1-F2 resident doctors
 ST1-3 resident doctors
 ST3-6 resident doctors
 ST7+ resident doctors
 Specialty and specialist (SAS doctor, or equivalent)
 Consultant doctor
 Nursing < band 7 (AFC)
 Nursing > band 7 (AFC)

Please specify any additional options here...

2a. Are refresher courses or continuing education sessions provided regularly?

- Yes No Unknown

2b. If answered "Yes" to [2a] then:**Please specify frequency:**

- Fortightly Monthly 6-monthly
 Annually Less frequently than annually

If not listed above, please specify here...

3a. Is there a formal assessment process to evaluate clinician competency in pleural procedures?

- Yes No Unknown

3b. If answered "Yes" to [3a] then:**How is competency in chest drain insertion assessed?***Answers may be multiple, please select all that apply.*

- By Direct Observation of Procedural Skills (DOPS)
 By locally-defined assessment

Please specify any additional options here...

4a. Is the use of ultrasound guidance included in the training programme?

- Yes No Unknown

**4b. If answered "Yes" to [4a] then:
How is competency in the use of ultrasound guidance assessed?**

5. Are resident doctors supervised during chest drain insertions until deemed competent?

- Yes No Unknown

6. Is there a designated trainer or educator responsible for pleural procedure training?

- Yes No Unknown

7a. Is there a minimum number of supervised procedures required before granting competency?

- Yes No Unknown

**7b. If answered "Yes" to [7a] then:
How many procedures?**

 Unknown

8. Are training records maintained and regularly updated?

- Yes No Unknown

9. Is 'post-procedure drain care' an essential competency for all nurses caring for patients who have a chest drain?

- Yes No Unknown

10a. If answered "Yes" to [9] then:

Are refresher courses regularly provided for nurses for continuing education sessions in post-procedure drain care?

- Yes No Unknown

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

Please specify the frequency

- Weekly Fortnightly Monthly Quarterly
 Biannually Annually Less frequently

If not listed above, please specify here...

1a. Is there a formal policy/guideline governing chest drain insertion practices/ pleural procedures within your institution?*I.E. separate to LocSSIPs*

- Yes No Unknown

1b. If answered "Yes" to [1a] then:**If YES, which aspects of the procedure are covered by the policy/ guideline:***Answers may be multiple, please select all that apply*

- Indications for the pleural procedure
 Technique employed
 Consent
 Risks of the procedure
 Management of anti-coagulants
 Appropriate location/s for carrying out the procedure (equipped for emergency procedures)
 Competence/ experience of operating clinician
 Use of ultrasound guidance
 Appropriate analgesia/ local anaesthetic
 Management of complications
 Post-procedure imaging studies to confirm drain placement
 Plan for drain management/ removal
 Post-procedure care
 Information provided to the patient/ carer

Please specify any additional options here...

2. Are Local safety standards (eg LocSSIPs) routinely employed at this hospital for pleural procedures?

- Yes No Unknown

3a. Is it defined in hospital policy that informed consent is obtained from the patient prior to carrying out a pleural procedure?

- Yes No Unknown

3b. If answered "Yes" to [3a] then:**How is consent usually obtained for pleural procedures?***Answers may be multiple, please select all that apply.*

- Verbally and recorded in the notes
 Via the completion of standard surgical/procedure consent form
 Via completion of a specific pleural procedures consent form
 Via completion of a 'Best Interest' form/ 'Form 4'
 Unknown

Please specify any additional options here...

4. Are there designated escalation protocols for complex or high-risk cases during out-of-hours periods?

- Yes No Unknown

5a. Is there a policy/ protocol/SOP at this hospital covering which investigations should be sent from pleural fluid?*I.E. Separate to what is indicated in LocSSIPs*

- Yes No Unknown

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

If so, please list the investigations that are carried out as standard:

- Microbiology Cytology Biochemistry

Please specify any additional options here...

6a. Is there a policy/ protocol/ SOP that states the maximum volume of pleural fluid to be drained within the first hour?

- Yes No Unknown

6b. If answered "Yes" to [6a] then:

What is the maximum volume of fluid?

 ml

7a. Is there guidance/SOP/protocol for monitoring patients after a pleural procedure/ chest drain insertion?

- Yes No Unknown

7b. If answered "Yes" to [7a] then:

What is included in the guidance/ protocol/ SOP:

Answers may be multiple, please select all that apply

- | | | |
|---|--|---|
| <input type="checkbox"/> Respiratory rate | <input type="checkbox"/> Oximetry | <input type="checkbox"/> Heart rate |
| <input type="checkbox"/> Blood pressure | <input type="checkbox"/> Temperature | <input type="checkbox"/> Fluid balance |
| <input type="checkbox"/> Volume drained | <input type="checkbox"/> Frequency of observations | <input type="checkbox"/> Swinging/ bubbling |
| <input type="checkbox"/> Unknown | | |

Please specify any additional options here...

1. Is there a standardised documentation template for chest drain insertions?

- Yes No Unknown

2a. Is the same documentation standard required for out-of-hours procedures as during routine hours?

- Yes No Unknown

Audit**2b. Is there a regular audit of chest drains/ pleural procedures carried out at this hospital?**

- Yes No Unknown

3. If answered "Yes" to [2b] then:**Which of the following are covered by the Trusts audit/s of chest drains/ pleural procedures:**

Answers may be multiple, please select all that apply

- Compliance with national guidance eg BTS guidelines
 Consent taking practices
 Documentation of the procedure
 Complications
 Patient satisfaction/ comfort
 Follow-up

Please specify any additional options here...

4. If answered "Yes" to [2b] then:**When was the most recent local audit carried out of clinical practice relating to chest drains?**

- Not Applicable Unknown

5. If answered "Yes" to [2b] then:**Is there a system for feedback to clinicians based on audit findings?**

- Yes No Unknown

6. If answered "Yes" to [2b] then:**Are audit results used to inform/ update training and procedural protocols?**

- Yes No Unknown

7a. If answered "Yes" to [2b] then:**Are audit findings relating to pleural procedures reported to hospital leadership and relevant committees?**

- Yes No Unknown

**7b. If answered "Yes" to [7a] then:
How frequently?**

- monthly (or more frequent) quarterly bi-annually
 annually less frequent than annually Unknown

If not listed above, please specify here...

**8a. If answered "Yes" to [2b] then:
Is there a process for continuous quality improvement based on audit data?**
Relating to pleural procedures

- Yes No Unknown

**8b. If answered "Yes" to [8a] then:
Please provide details:**

9a. Are there an any other learning opportunities regarding chest drain insertions?

- Yes No Unknown

**9b. If answered "Yes" to [9a] then:
Which other learning opportunities in relation to chest drain insertion/ pleural
procedures are there?**

Answers may be multiple, please select all that apply.

- | | |
|---|---|
| <input type="checkbox"/> Mortality and Morbidity (M&M) review | <input type="checkbox"/> Trust/ hospital-level governance |
| <input type="checkbox"/> Departmental governance | <input type="checkbox"/> ICB governance |
| <input type="checkbox"/> Patient feedback | |

Please specify any additional options here...

INCIDENT REPORTING

10. Which system is used locally for incident reporting?

Answers may be multiple, please select all that apply. See <https://shorturl.at/ZzFSe> for more information

- Datix (RLDatix / Datix Cloud IQ)
- InPhase / Incident Oversight
- Ulysses 2000 Ltd
- Radar Healthcare (Smartgate Solutions Ltd)
- Pharmapod (a Think Research Company)
- Vantage Technologies(Vantage Incident, Risk, Feedback, Facilities Management and Compliance Softw
- Pharmsmart (CDsmart Ltd)
- Risksured Ltd. (Fhirsoft)
- Phoenix Medical Supplies Patient Safety Incident Management System.
- MEG Quality Management System
- Day Lewis PLC (internally recorded incidents and Good Care events)
- Quality Improvement Technology Limited

If not listed above, please specify here...

11. The incident reporting system:

Answers may be multiple, please select all that apply.

- can be easily searched to extract data on key fields eg searching "chest drain"
- provides automated tools to help investigators identify common themes
- can be used to identify long-term trends in patient safety/ improvements in care care
- allows managers to easily provide feedback to the reporter on actions taken
- is bi-directionally linked with the Electronic Patient Record (EPR), allowing for clinical data (eg admissic
- is linked to other routine clinical information (e.g., Hospital Episode Statistics) to enrich analysis withou
- automatically uploads or links to national databases (eg LFPSE or NRLS) to streamline mandatory repo
- none of these
- unknown

Please specify any additional options here...

12a. Has the incident reporting data been interrogated for learning from recent incidents relating to pleural procedures?

- Yes No Unknown

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

If Yes, how many incidents relating to pleural procedures occurred in 2025?

(total number of incidents reported between 1/1/2025 - 31/12/2025)

- Not Applicable Unknown

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

How many of these were rated as "No harm"?

- Not Applicable Unknown

12d. How many of these were rated as "Low harm"?

- Not Applicable Unknown

12e. How many of these were rated as "moderate harm"?

- Not Applicable Unknown

12f. How many of these were rated as "severe harm"?

- Not Applicable Unknown

12g. How many of these were rated as "fatal"?

- Not Applicable Unknown

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

Please provide details:

1. Please use this box to highlight any good/ outstanding practice that has taken place locally relating to chest drains/ pleural procedures

2. Please use this box to highlight any gaps in the service relating to chest drain insertion/ pleural procedures that you are aware of

eg staffing, record of competency, out-of-hours cover

3. Please use the box below to write any other comments regarding chest drains/ pleural procedures

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 late 2026