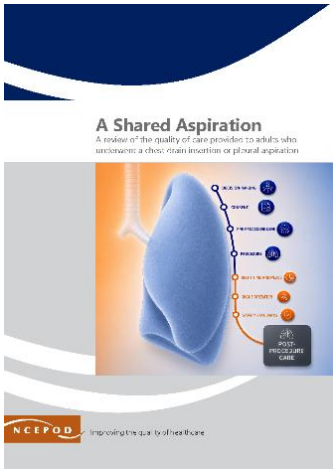
Commissioner's Guide to the NCEPOD Report 'A Shared Aspiration'

INTRODUCTION



This review highlighted opportunities to improve the care of patients undergoing **chest drain insertion or pleural aspiration**. These procedures are commonly undertaken across a wide range of specialities and healthcare settings, often in **urgent or emergency situations**, making the delivery of safe, high-quality care essential.

Care provided to patients who underwent chest drain insertion or pleural aspiration during a hospital admission was examined, alongside the organisational factors that influence patient safety and quality of care. Incident investigations relating to these procedures were also considered, together with the lessons learned from these events.

Findings identified variations in how pleural procedure services are organised, governed, and supported. Clinician confidence and competence in chest drain insertion emerged as important factors in the delivery of safe care, alongside the availability of appropriate training, supervision and specialist support. Patient experience was also explored to provide greater understanding of care from the patient's perspective.

Ensuring that organisations have effective systems to support safe decision-making and delivery of chest drain insertion and pleural aspiration, embed patient safety standards, learn from incidents and provide high-quality patient-centred care will be essential to improving outcomes for patients requiring these interventions.

Please use this report to guide your commissioning of services, with emphasis on the areas highlighted here.

THE REPORT CAN BE ACCESSED HERE

KEY AREAS WHEN COMMISSIONING SERVICES

There was variation in the approaches taken to undertake chest drain insertions and pleural aspirations that contributed to risk, including decision making, consent, safety checks, pain management, post-procedure chest drain care, chest drain removal and management of complications.

Recommendation: Agree minimum standards for chest drain insertions and pleural aspirations that can be used for all patients, by all specialities.

- There were opportunities to improve care and the subsequent pathway prior to the admission for 68/563 (12.1%) patients.
- There was room for improvement in clinical care in 320/547 (58.5%) patients and in the organisation of care in 124/547 (22.7%). Care was rated as less than satisfactory for 29/547 (5.3%) patients.
- Written consent was documented in only 314/563 (55.8%) patients. Use of procedure-specific consent forms was limited, being present in only 68/173 (39.3%) hospitals.

- Reviewers identified room for improvement in the consent process in more than half of assessable case notes (278/483; 57.6%), most commonly due to incomplete documentation rather than complete absence of consent.
- There was a delay in the decision to insert a chest drain in 94/477 (19.7%) patients. There were further delays in carrying out the procedure after the decision had been made in 139/563 (24.7%) instances.
- Procedure safety checklists (LocSSIPs) were not routinely documented, being present in only 182/526 (34.6%) cases reviewed and reported by clinicians for 353/755 (46.8%) patients. It was reported from 23/163 (14.1%) hospitals that they did not routinely employ LocSSIPs for chest drain insertion.
- The presence of a safety checklist was associated with fewer consent-related concerns and improved overall quality of care. This suggests that checklist use is a marker of a more structured and safety-focused pathway, rather than simply a documentation exercise.
- In the view of the reviewers there was room for improvement in the pain management of 65/373 (17.4%) patients. Furthermore, reviewers were unable to answer in 190 cases, suggesting that documentation was often insufficient to judge the quality of pain management.
- While chest radiography was commonly recorded, other important elements, including drainage targets (170/334; 50.8%), monitoring plans and pain management (128/334; 38.3%), were frequently omitted.
- 106/440 (24.1%) patients had no documented post-procedure plan and where there was one, important elements, including drainage targets, were frequently omitted.
- Of the patients with an effusion, 34/338 (10.0%) had more than 1500ml of fluid drained within the first hour after insertion.
- 75/396 (18.9%) chest drains were not left in place for an appropriate duration, with both premature removal (n=26) and prolonged retention (n=43) observed (unknown in six).
- Reviewers identified complications on review of 127/542 (23.4%) patients. The reviewers considered that 48/127 (37.8%) complications were reportable as a clinical incident, and of these, 37/48 patients had suffered harm as a result. There was evidence in the case records that only four of these events had been reported.

Many clinicians who were undertaking chest drain insertions and pleural aspirations reported a lack of confidence, especially out of hours. Non-emergency chest-drains were frequently inserted out of hours. Across different specialities there was variation in the delivery of training in these procedures. There were also gaps in the recording of training and competency assessments.

Recommendation: Embed mechanisms to optimise the safety of chest drain insertion and pleural aspiration out of hours.

- The majority of patients were admitted via the emergency department (739/954; 77.5%). Overall, 497/954 (52.1%) patients in the study were admitted outside of weekday working hours (08:00–17:59). The out of hours admissions were split between weekdays (232/497; 46.7%) and weekends (265/497; 53.3%).
- There were 153/475 (32.2%) urgent and 24/219 (11.0%) non-urgent procedures undertaken out of hours. Overall, only 74/251 (29.5%) out of hours procedures were considered emergencies, indicating room to improve compliance with the best practice.
- Published data from the healthcare professional survey showed that self-reported confidence in chest drain insertion among non-respiratory medical registrars diminishes with increasing time since their last

pleural procedure. The survey also showed that doctors in specialties with experience of pleural procedures within the last year were more likely to feel confident inserting a chest drain without supervision. However, in no specialty were all doctors confident with pleural procedures.

- When asked whether they had ever performed an out of hours pleural procedure, 63/64 (98.4%) doctors in respiratory medicine and 63/83 (75.9%) doctors in emergency medicine reported having done so. A lower percentage of doctors in intensive care medicine (85/159; 53.5%) and general medicine (121/391; 30.9%) had actual out of hours experience.
- Only 44/391 (11.3%) general medicine clinicians felt confident to insert a chest drain unsupervised.
- Data from the organisational survey showed that a specialist pleural team was available in 118/178 (66.3%) hospitals. Cover by this specialist team was available 24/7 in five hospitals and for 40 hours (five working days of eight hours) or less in 92/118 (78.0%) hospitals, confirming that many hospitals had different arrangements in place for chest drains and pleural aspirations undertaken out of hours.
- Just 16/173 (9.2%) hospitals ensured that a competent operator was present on their on-call rota and only 62/173 (35.8%) hospitals had an escalation protocol for complex or high-risk patients out of hours.
- Pleural services were involved for 143/522 (27.4%) patients. For the 379 patients where a service was not used reviewers believed it should have been for 144/357 (40.3%) but identified 213 patients where this was considered appropriate.
- The reviewers considered that the grade and specialty of the person making the decision was appropriate in 449/563 (79.8%) instances. There were only 21/513 (4.1%) cases reviewed where the person making the decision made it remotely (unknown in 50). Advice was sought from another healthcare professional about the pleural procedure in 176/492 (35.8%) cases (unknown in 71). Again, this advice was sought by doctors in all specialties.
- With better decision-making, 82/563 (14.6%) patients could have had a less invasive approach.
- Procedure safety checklists (LocSSIPs) were only documented in 182/526 (34.6%) cases reviewed.

SUPPORTING NATIONAL GUIDANCE AND REPORTS

- BRITISH THORACIC SOCIETY: QUALITY STANDARD FOR PLEURAL DISEASE
- BRITISH THORACIC SOCIETY: GUIDELINE FOR PLEURAL DISEASE
- BTS BRITISH THORACIC SOCIETY: CLINICAL STATEMENT ON PLEURAL PROCEDURES
- INTENSIVE CARE SOCIETY: CHEST DRAIN SAFETY CHECKLIST
- COLLEGE OF INTENSIVE CARE MEDICINE: SAFETY CHECKLISTS NATSSIPs2 AND LOCSSIPs
- CLINICAL COORDINATING COMMITTEE ICU CHEST DRAIN PROTOCOL
- ROYAL COLLEGE OF EMERGENCY MEDICINE: BEST PRACTICE GUIDELINE ON CONSENT
- CHEST DRAIN INSERTION: A PRACTICAL GUIDE
- GENERAL MEDICAL COUNCIL: PROFESSIONAL STANDARDS: DECISION-MAKING AND CONSENT
- NATIONAL SAFETY STANDARDS FOR INVASIVE PROCEDURES (NATSSIPS)
- GIRFT: RESPIRATORY MEDICINE
- FACULTY OF PAIN MEDICINE: CORE STANDARDS
- FAMUS ACCREDITATION PATHWAY ON ACUTE MEDICINE ULTRASOUND
- MY PLEURAL EFFUSION JOURNEY
- INSERTION OF A CHEST DRAIN PATIENT LEAFLET
- MACMILLAN CANCER SUPPORT: PLEURAL EFFUSION