Introduction and objectives Chest drain insertion is a common advanced procedure with a significant associated risk of pain, distress and serious complications. Nationally, audit and patient safety work has highlighted a number of safety concerns around chest drain insertion.

Previous audit work has demonstrated poor levels of documentation; particularly around use of pre-medication, use of ultrasound guidance and consent. This has obvious potential consequences for patient safety and thus is an important target for improvement work.

Method National best practice standards were identified through review of national guidance. This work quantifies current standards of documentation in Gloucestershire against national best practice standards. Drain insertion was prospectively analysed over a 3 month period to establish baseline standards of documentation. A combination of accessible and easy-to-read guidelines, education and the introduction of a chest drain bundle were introduced. Chest drain insertion was then re-audited over a further 3 month period and assessed for improvement.

Results The data set included 24 pre-intervention and 23 post-intervention. Results demonstrated an improvement in many areas of documentation. Prior to the intervention, documentation was found to be poor; especially in areas related to consent, use of ultrasonography, pre-medication, post-procedure advice, details regarding length and size of drain and investigations requested. Overall the results showed improvement in most areas of documentation.

The care bundle demonstrated improvement in documentation compared to the classical “freehand” documentation. However, only 40% of cases used the new proforma due to a mixture of staff rotation and an unexpectedly high proportion of drains inserted in non-targeted areas including the emergency department, theatre and intensive care.

Outcomes were also compared against the recent national findings from the 2015 British Thoracic Society Pleural Procedures audit. Use of the chest drain bundle created improved compliance with several key standards; particularly written consent, bedside ultrasonography, nursing chest drain observation and care on designated respiratory ward.

Conclusion The chest drain care bundle improves documentation of this important procedure. This is important to ensure uniformity in clinical “best” practice, aid communication and protect patients. Further improvements can be made by more widespread education and access to the care bundle.

Abstract P186 Figure 1 Comparison of written consent obtained pre-intervention, post-intervention, when proforma exclusively used and national average. Target = 98%

Abstract P186 Figure 2 Comparison of use of bedside ultrasonography pre-intervention, post-intervention, when proforma exclusively used and national average. Target = 100%

Abstract P186 Figure 3 Comparison of use of nursing drain observation sheets pre-intervention, post-intervention, when proforma exclusively used and national average. Target = 100%

Abstract P186 Figure 4 Comparison of care on respiratory ward pre-intervention, post-intervention and national average. Target = 100%

P187 THE DIFFICULTY IN IMPLEMENTING A SAFETY CHECKLIST FOR PLEURAL PROCEDURES

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10.1136/thoraxjnl-2015-207770.324

Introduction There are significant risks associated with pleural procedures.¹ NHS England have been cataloguing never events since 2012 and pleural procedure related events are one of the most common procedures causing harm that we as physicians perform.² The WHO Surgical Checklist was developed to minimise morbidity and mortality associated with high-risk procedures.³ We introduced a modified WHO safety checklist for all pleural procedures following 2 never events in our trust.

Aim We wished to establish the use of the modified WHO safety checklist for all pleural procedures throughout the trust, excepting those done in emergency situations.

Methods We completed audits to review the implementation of the checklist. This was following writing trust guidelines, extensive teaching and presentations throughout the trust and to multiple departments on its use over a three-year period. We completed retrospective, spot check audits for one month of all pleural procedures in November 2013 and then re-audit in November 2014.

Results In 2013 the checklist was used in 14/40 of cases (35% overall, 47% of medical patients) and re-audit showed similar results with its use in 20/47 (38%).

Discussion Following Route Cause Analysis of 2 never events, a modified WHO safety checklist was identified as a potential way of preventing future similar adverse events in our trust. Despite numerous teaching sessions and discussion in other fora we have seen that it is still not being used in the majority of cases. We feel that the use of safety checklists should be considered for all procedures that have the potential for serious harm and will continue to strive towards implementing this within our trust. It is possible that if it were to be nationally mandated or included in national guidelines that this would bring further weight towards its use.

Abstract P187 Figure 1

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P188 SURVEY OF USE OF SAFETY CHECKLISTS AND STANDARDISATION OF PRACTICE IN THORACOSCOPY CENTRES IN THE UK

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10.1136/thoraxjnl-2015-207770.325

Introduction and objectives Safety checklists have been part of routine surgical practice for some time with evidence for reduction in morbidity and mortality. The use of such checklists in physician led interventions is more of a novelty. Several recent

papers have been published outlining the introduction of safety checklists in the field of cardiology and gastroenterology. The 2013 BTS bronchoscopy guidelines include an adapted WHO surgical checklist, but there are no such recommendations in the BTS pleural disease guidelines. A literature search did not reveal any evidence of use of safety checklists within the area of local anaesthetic thoracoscopy.

Our department set out to adapt and introduce a safety checklist for use on our thoracoscopy list, and to ascertain whether such practice is common place on UK thoracoscopy lists. Additionally, we looked to assess whether other aspects of thoracoscopy practice were standard across the UK.

Method A checklist for use in thoracoscopy was adapted from the WHO surgical checklist. Additions specific to thoracoscopy included assessment of drain function post procedure.

A brief survey was sent out electronically to 23 medical thoracoscopy practitioners throughout the UK. Questions assessed whether a safety checklist was in use, whether significant complications had occurred and whether MRSA screening and antibiotics prophylaxis were common practice.

Results A 35% response rate was achieved. 75% of participants were using pre procedure checklists. 63% of respondents had experienced issues with equipment malfunction or sterility. 75% of respondents had experienced significant clinical complications; death (12.5%), pleural space infection (50%), bleeding (25%), other (25%). MRSA screening was carried out in 50% of centres whilst prophylactic antibiotics were used in 25%.

Conclusions Amongst the responders there was a high rate of use of pre-procedure checklists. This may not be representative of practice throughout the UK due to the relatively low response rate. A significant proportion of respondents had experienced equipment related complications, something that is likely to be picked up during routine safety checks prompted by a checklist. The survey results suggest a lack of consistency in practice across the UK and more prescriptive guidelines may be beneficial.

P189 DEVELOPMENT OF PATIENT-CENTRED OUTCOMES FOR A PLEURAL DISEASE SERVICE

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10.1136/thoraxjnl-2015-207770.326

Introduction and aim There are no standardised methods for developing patient-centred service outcomes. We recognised the need for locally derived outcomes for a new pleural disease service.

Methods A survey was administered to patients who had had a pleural or ascitic drain/aspiration. The survey combined open and closed questions e.g What is important to you? We carried out emotional mapping in half of the subjects with the aim of gaining more in depth information on patient experience (see NHS institute website). We held a structured discussion with one patient's relative to explore the themes more broadly.

Patients were identified from three acute areas, over a six week period. They were typical of patients from the medical take and respiratory ward. The survey and emotional mapping were carried out with patients face-to-face by the project lead.

Themes from the survey and emotional mapping were identified. The most common themes from the data were discussed in the structured discussion.