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

### REFERENCES

- National Patient Safety Agency. Rapid Response Report: Risks of Chest Drain Insertion. 2008, reference NPSA/2008/RRR003. http://www.nrls.npsa.nhs.uk/ resources/?entryid45=59887 (accessed 1 Oct 2015)
- 2 NHS England. Never Events Summary 2014 http://www.england.nhs.uk/wp-content/uploads/2014/12/2013-14-NE-data-FINAL.pdf (accessed 1 Oct 2015)
- 3 Haynes AB, Weiser TG, Berry WR, et al. A surgical safety checklist to reduce morbidity and mortality in a global population. N Engl J Med 2009;360:491–9

P188

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

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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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**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.

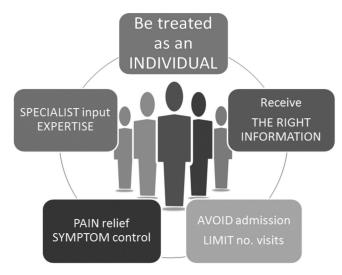
Methods A survey was administered to patients who had had a pleural or ascitic drain/aspiration. The survey combined open and closed questions e.g What is important to you? We carried out emotional mapping in half of the subjects with the aim of gaining more in depth information on patient experience (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.

**Results** 18 patients were surveyed (4 after ascitic procedures), 9 had emotional mapping. The mean overall service rating was 4/5. The graph above represents both responses to the question 'What is important to you?' and themes that emerged from emotional mapping.

More detailed insight was gained from the discussion with one patient's relative, this was triangulated with the other data to give a clearer picture of what was most important to patients. Similar themes were combined to form 5 final patient-centred outcomes that were important to patients (see Figure 1 attached). E.g. 'Be treated as an INDIVIDUAL' encompassed good interpersonal relationships and personal choice, and 'Receive the RIGHT INFORMATION' for consent, medical care and managing waiting.



#### Abstract P189 Figure 1

Discussion These five outcomes were developed for a specific service. The data has come from a relatively small number of patients from a specific cohort, but they seem credible, and may be more widely applicable. The next step is to measure the service against these outcomes before and after the. A new patient survey has been designed to measure these outcomes. It will be administered before and after the start of the new service.

### Home non-invasive ventilation

P190

DEVELOPMENT OF A RESPIRATORY QUESTION SET FOR REMOTE MONITORING IN MOTOR NEURONE DISEASE (MND)

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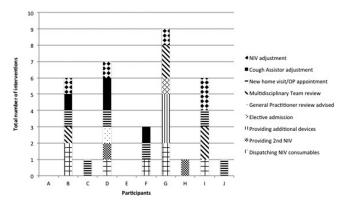
10.1136/thoraxjnl-2015-207770.327

Background Benefits of tele-monitoring (TM) of home non-invasive ventilation (NIV) in MND have been reported. Question sets for other respiratory conditions may not be transferrable. This work sought to develop questions transmitted via tablet device (Docobo Careportal<sup>®</sup>) allowing patients to inform clinicians of respiratory status, illness progression and NIV issues. Methods Modified Delphi methodology was used involving 4 stages: initial expert panel with clinicians (EP1), trial of

questions and feedback sessions (FS) with patients, second panel with professionals (EP2). 21 questions were developed at EP1 and trialled with 9 patients (male = 7; mean = 58 years; mean illness duration = 52 months) for 8 weeks. FS were conducted after the trial to examine face validity, clarity and relevance. Each question was deemed clear if at least there was 80% agreement.18 questions were retained, 3 modified, 2 deleted and 5 added. EP2 repeated the process, the resulting final question set contained 26 items of which 17 generate a notification. Patients completed questions weekly, appropriateness of alerts was checked by phone call; the panel specified some notifications to be of greater clinical importance requiring intervention or further observation. It was possible to review reported issues against overnight oximetry and patient ventilation interaction data.

Results For 12 weeks, 10 patients using NIV male = 7; mean (SD) age = 62 (8) years; median illness duration = 16.5 months, completed the final question set weekly. 210 alerts (geometric mean 15.3, IQ range 11–24.) were generated for; sleep quality, alertness, tiredness, NIV compliance, secretion clearance difficulty, increased secretions, and increased dyspnoea. 34 interventions resulted as described in the bar chart: the median number of interventions per patient was 2 (range = 0–9).

Discussion To date the questions appear valid with no misunderstanding revealed. Appropriate and timely treatment adjustment and clinical review was facilitated. Prompt interventions may reduce psychological distress for patients and caregivers. This patient group are normally followed up three-monthly under the current NICE guidance; this question validation work suggests value in more frequent contact. Tele-monitoring, including symptom monitoring with a validated question set, may offer an alternative approach to following these complex patients.



**Abstract P190 Figure 1** Bar chart showing total number and type of interventions per participant

P191

SURVIVAL IN PATIENTS WITH CHRONIC TYPE 2
RESPIRATORY FAILURE: A COMPARISON OF OBESITY
HYPOVENTILATION SYNDROME, COPD AND OVERLAP
SYNDROME

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**Introduction and objectives** Home non-invasive ventilation (NIV) is established for the treatment for patients with obesity-related type 2 respiratory failure. Long-term outcomes for the use of NIV in patients with chronic hypercapnic COPD and "overlap syndrome" are less certain. Our objective was to

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