Other relevant checklists e.g. WHO surgical safety checklist were also reviewed. After an iterative design process involving chest physicians, general physicians, trainees and nurses, a checklist was devised, piloted and introduced into practice.

Conclusion The Chest drain safety checklist was introduced in August 2011, and has since been adopted by the A&E Department and also neighbouring hospitals. Since its introduction, there have not been any adverse incidents in the Medical Department involving intercostal chest drain insertions. There is more confidence amongst nursing staff as they feel more involved and engaged. Trainees find the structured approach particularly helpful in ensuring key steps are not missed and patient safety ensured, and seek supervision and assistance more readily.

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2. The NPSA 'never events' 2011/2012, Department of Health

Abstract P213 Figure 1.

P214 IMPROVING OUTCOMES—THE WORK OF A SPECIALIST MESOTHELIOMA MDT

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Introduction Mesothelioma is an uncommon malignancy with a poor prognosis, and in order to improve its management all cases within each cancer network should be discussed at a specialist MDT, which advises individual cancer units on the best treatment approach for their patients. We have reviewed the work of the specialist mesothelioma MDT for the Mersey and Cheshire Network (MCCN) since its inception in 2009.

Aim and Methods We assessed all patients referred from the 6 contributing lung cancer units (A to F) over 4 years, looking at histology, performance status (PS), investigations undertaken, treatments offered, and mortality rate.

Results Of 182 patients (mean age 76 years [SD 8], median PS 1, 157 male), 11 (6%) had a clinical diagnosis only. One hundred and seventy one patients had a tissue diagnosis (45% epithelioid, 7% sarcomatoid, 13% mixed, 29% unspecified). This was obtained by VATS in 79/171 (46%) and CT-guided biopsy in 43/171 (25%). 21 (12%) had a cytological diagnosis only.

MDT advice on treatment options was offered in all cases; 88 (48%) received radiotherapy and 51 (28%) chemotherapy. 142 (78%) patients have died (median survival of 378 days). 1-year

and 2-year survival rates were 51.3% and 16.9% respectively. However, in those who received chemotherapy, survival improved significantly (1-year 91.7% and 2-year 63.5% respectively; both $p < 0.0001$).

Data for individual cancer units is given in the table (table 1).

Conclusions We have shown that those patients offered active treatment have a distinct survival advantage compared to the remainder. The cooperation of 6 cancer units in the MCCN to form a specialist mesothelioma network with a regular MDT has shown that this approach can improve the outcome for this unfortunate group of patients.

Abstract P214 Table 1.

PARAMETER	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F
Number	34	27	50	23	20	28
ALIVE	18%	19%	30%	13%	15%	29%
RADIOTHERAPY	53%	59%	38%	52%	35%	57%
CHEMOTHERAPY	29%	33%	30%	22%	30%	21%
VATS	35%	30%	46%	30%	55%	64%
MEDIAN SURVIVAL (DAYS)	193	404	388	500	128	374

P215 ALTERING PRACTICE IN MESOTHELIOMA—THE VALUE OF SPECIALIST MDT INPUT

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10.1136/thoraxjnl-2013-204457.367

Introduction Mesothelioma is an uncommon malignancy with a poor prognosis, and in order to improve its management all cases within each cancer network should be discussed at a specialist MDT, which advises individual cancer units on the best treatment approach for their patients. The regional specialist mesothelioma MDT for the Mersey and Cheshire Cancer Network (MCCN) was incorporated in 2009, and we were interested to assess the effect this had on the outcome of mesothelioma patients attending our large cancer unit.

Method We compared clinical parameters for all our mesothelioma patients before and after the inception of the specialist MDT, looking at symptoms, investigations carried out, the histological rate and type, and treatments offered.

Results Fifty five patients were diagnosed between 2007 and 2011 (mean age 75 years [SD 7.35], median WHO performance status 1, 46 male). Most (85%) were symptomatic at presentation—18 (32%) had chronic cough, 27 (49%) pain and 38 (69%) dyspnoea. 23 (42%) had documented asbestos exposure. Diagnosis was made clinically in 1 patient and by cytology alone in 4 patients.

Abstract P215 Table 1.

Parameter	2007–8	2010–11	p-value
Number	19	24	
Diagnostic Test			
CT-biopsy	4	5	NS
VATS	11	17	NS
Treatment			
Radiotherapy	7	16	<0.05
Chemotherapy	7	6	NS
Decortication	6	1	<0.05
Other Surgery	6	2	<0.05

Diagnostic methodology and treatment modalities for the 2-year periods before (2007–8) and after (2010–11) the specialist MDT formation are given in the table (Table 1). There was no difference in histological rates (100% and 92% respectively) or cell types between the two periods.

Conclusions In the second time period, our use of radical oncological treatment increased and at the same time extensive surgical treatment decreased, in keeping with current considered best practice. These changes in clinical practice coincided with discussion of these cases at the newly formed MCCN specialist mesothelioma MDT. This study emphasises the value of an expert multidisciplinary approach to the management of this unfortunate group of patients.

P216 ANALYSING THE SUCCESS RATES OF PLEURODESIS IN PATIENTS ADMITTED TO AN ELECTIVE SHORT STAY WARD

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Introduction Pleural effusions are a common respiratory problem and account for 20,000 hospital episodes annually. 70% of patients need admission of 7 days or more (1). Treatment options include pleurodesis and long term indwelling pleural catheters (IPC)(2). Traditionally, management has involved recurrent lengthy hospital admissions which are both inconvenient for the patient and expensive. To reduce these problems, we admit patients to an elective short stay ward where they undergo pleurodesis and are discharged after 1–2 days.

Aim To assess the effectiveness of pleurodesis in patients admitted to an elective short stay ward.

Method We retrospectively reviewed 33 patients who were managed on an elective ward. A 12F Chest drain was inserted followed by administration of 4g sterile talc. Patients who did not re-attend with an effusion within in the following six months, or prior to dying were considered a success.

Results During 2009–2010, 33 patients with an average age of 66.5 years underwent pleurodesis on the elective short stay ward. 23/33 patients did not re-attend with an effusion within six months (70%). However, 10 re-attended with a recurrent effusion despite talc (30%). Of these, 3 patients had trapped lung on their xray and 1 had a chylothorax. Both are reported causes of failure (2). Chest drains stayed in for 1–2 days, with an average inpatient stay of 2 days. 18/33 patients died within 3 months of admission (54%). Of the 10 that re-attended, 6 died within 3 months (60%). There were no complications resulting from this procedure.

Conclusions Patients who are admitted to an elective short stay ward are managed safely and effectively. They require a shorter inpatient hospital stay which is cost-effective. Our results illustrate 70% of patients did not require an IPC but treatment with pleurodesis alone was sufficient to prevent re-attendances. Most patients do not require an acute hospital admission. Patients who do re-attend with a recurrent effusion due to trapped lung can be considered for IPC.

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P217 DOES CHEMOTHERAPY INCREASE THE RISK OF DEVELOPING PLEURAL INFECTIONS IN PATIENTS WITH INDWELLING PLEURAL CATHETERS?

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Introduction Indwelling Pleural Catheters (IPC) are indicated for the management of recurrent or resistant Malignant Pleural Effusions (MPE), usually after talc pleurodesis. While generally safe and effective, they carry a risk of pleural infection thought to be 4.7%[1]. We have noticed a number of empyema's in patients receiving chemotherapy with an IPC, and want to see if there is an increased risk for IPC associated infection with chemotherapy in MPE above that in the general population.

Methods We reviewed all patients in our hospital who have received an indwelling pleural catheter, from the implementation of the service in February 2011 until June 2013. We reviewed patient details, indication for IPC, possible or definite infection post procedure and relation to chemotherapy. This information was obtained from patients' medical records, pathology reports and the radiology system.

Results 86 IPC's have been inserted from February 2011 until June 2013. Five of these were replacement drains (replaced due to blockage, displacement or infection). A total of 21/86 (24%) patients had chemotherapy either immediately before IPC insertion or with IPC in place. 11 patients (12.8%) were treated for suspected pleural infections, but only 5 patients (5.8%) were confirmed with positive pleural cultures. 3 of the 5 patients were undergoing chemotherapy at the time of the infection

Conclusions Patients receiving indwelling pleural catheters are usually those with a malignant process and therefore chemotherapy is a common treatment used in this population. Although our numbers are small, they suggest that there may be an increased risk of pleural infection in patients with an IPC who undergo chemotherapy. Until a larger analysis can be done, it would be reasonable to consider prophylactic antibiotics during catheter insertion if a patient is due to have chemotherapy.

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Abstract P217 Table 1.

Patient	Indication	Cultures	Timing of infection	Chemotherapy
1	Lung cancer	S. aureus & Group C Strep from pleural fluid	Time of insertion	No
2	Breast cancer	Pseudomonas from pleural fluid	8 months	Yes
3	Lung cancer	S. aureus from pleural fluid	3 weeks	No
4	Mesothelioma	S. aureus from pleural fluid	2 months	Yes
5	Lymphoma	MRSA from pleural fluid	2 months	Yes

P218 PREDICTING PNEUMOTHORAX OUTCOME BY AIR LEAK MEASUREMENT: PILOT USING DIGITAL SUCTION DEVICE

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