US performed in radiology were 4%, 0.7% referred by the respiratory teams and the rest mainly from intensive care.

No major complication (death, organ injury, empyema, bleeding) occurred. All specialist registrars reached level 1 US.

Conclusion A dedicated mid-week pleural procedures session improved the training and supervision for respiratory trainees and provides a safe service.

This session reduced the burden of procedures performed on Mondays but was not sufficient to reduce the numbers performed before the weekend. An additional session is planned for Fridays.

A level 1 thoracic US trained ANP assisted the training of juniors and the provision of service.

Most pleural US and procedures are performed on the pleural unit, which reduced the burden on radiology department.

P72 IN THE POST ULTRASOUND ERA, ARE CORE MEDICAL TRAINEES STRUGGLING TO GET EXPERIENCE IN CHEST DRAIN INSERTION?

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Introduction In the UK, upon completion of Core Medical Training (CMT), procedural independence is expected for pneumothorax drains and is desirable for pleural effusions. In 2009, prompted by a National Patient Safety Agency report, a local guideline was introduced in our hospital aiming to reduce intercostal chest drain (ICD) complications for effusions by formalising training, increasing supervision and utilising bedside ultrasound scan (USS). Consequently, rates of adverse events have significantly been reduced. This raises the question, however, have such measures reduced the procedural exposure for CMT doctors.

We aimed to compare the numbers of ICDs inserted by CMT doctors for effusions in 2008 and 2012. The numbers of ICDs inserted by CMTs for pneumothorax compared to effusion in 2012 was also examined.

Methods All patients who received an ICD for effusion or pneumothorax in 2012 and for effusion in 2008 were retrospectively reviewed. We reviewed grade of doctor performing ICD insertion, supervision, and use of USS (for effusion).

Results CMTs inserted significantly less ICDs for effusions in 2012 (10/30, 33%) compared to 2008 (20/39, 51%) $z = 1.75$, $p = 0.04$. Supervision rates increased from 73% in 2008 to 100% in 2012. Bedside USS was used in 100% of effusion-related ICDs in 2012 compared to 0% in 2008.

In 2012 alone, CMTs inserted significantly fewer ICDs for pneumothorax (4/28, 14%) compared to effusions (10/30, 33%) $z = -1.69$, $p = 0.046$. A&E doctors inserted the majority of ICDs for pneumothorax (15/28, 53%), whilst a Respiratory Registrar/Consultant inserted the majority of ICDs for effusions (13/30, 43%).

Conclusions Since 2008, there has been a significant reduction in ICD insertions by CMTs. The majority of ICD insertions for pleural effusions being performed using USS by appropriately trained respiratory physicians may explain this. The significant fall in the number of ICD insertions by CMTs for pneumothorax (where USS guidance is not required) however, suggests that overall ICDs are becoming a specialist procedure rather than a generic competency. Trainees are at risk of not fulfilling their competency requirements and this poses the question should procedural training and curriculum objectives be readdressed in light of the growing need for USS experience.

P73 THE CREATION OF A SIMULATED PAN-DEANERY MEDICAL THORACOSCOPY AND INDWELLING PLEURAL CATHETER COURSE

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Introduction Medical thoracoscopy (MT) and indwelling pleural catheter (IPC) insertion are becoming increasingly utilised for the purposes of diagnostic and therapeutic intervention in pleural disease. We are at the cusp of a paradigm shift towards the expansion of hospital services within Respiratory departments nationally, to accommodate the ever increasing demand of advances in medical treatment. Few courses are available that train respiratory doctors nationally. Health Education Yorkshire and The Humber have designed a novel simulation course to teach trainees the skills of MT and IPC insertion.

Methods A respiratory simulation team involving three consultants and a registrar used an approach similar to that described by Tjiam *et al*. 2012 using a cognitive task analysis (CTA) and the four component instructural design (4C/ID) as the basis of the course. The blueprint was created which broke down the tasks involved. The course consisted of four lectures and a demonstration followed by four stations including medical thoracoscopy; trocar and chest drain insertion; IPC insertion and a multiple choice questionnaire (MCQ). Peer review of the lectures and also the MCQ was also carried out. All consultants from specialist lung cancer services across the region were invited to be faculty on the course. Pre and post course Likert scale questionnaires were used to assess confidence levels.

Results Statistically significant improvements in confidence levels were achieved in all 8 domains, particularly in technical ability

Abstract P73 Table 1. Trainee improvement in confidence after attending the Medical Thoracoscopy and IPC insertion

Confidence levels in:	Number of trainees	Mean Improvement (SD)	% Improvement	P Value
Knowing the indications for thoracoscopy	Pre=11, Post=11	1.27(0.65)	31.82	0.004
Knowing the contra-indications for thoracoscopy	Pre=11, Post=11	1.36(0.67)	34.09	0.004
Consenting the patient and quoting accurate complication rates	Pre=11, Post=11	1.36(0.5)	34.09	0.002
Being aware of the complications of thoracoscopy	Pre=10, Post=11	1.3(0.67)	32.50	0.006
Knowing the limits of safe conscious sedation and the complications	Pre=11, Post=11	1.54(0.93)	38.64	0.004
Technical ability in handling the thoracoscopy equipment	Pre=11, Post=11	2.54(0.82)	63.64	0.004
Knowing the indications for IPC insertion	Pre=10, Post=11	2.1(1.1)	52.50	0.007
Technical ability in performing an IPC insertion	Pre=11, Post=11	2.45(1.69)	61.36	0.007