

**Results and evaluation** Attendance was 31/32. 59% had 12 months or less experience as a registrar. 66% were able to perform thoracentesis and 63% seldinger drain independently. Most others were competent enough to perform with a colleague supervising. Additionally 38% and 25% of registrars were deemed to be able to teach other thoracentesis and seldinger drains respectively.

Learner feedback was extremely positive and self-rated confidence and safety improved from 5–7.6 and 5.2 to 7.7 out of 10 respectively. Responses highly valued the fact this was delivered by a Consultant and identified a need for further bedside chest US training.

### M19 PATIENT PERSPECTIVES OF AN AMBULATORY PLEURAL SERVICE

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**Background and objectives** Barking, Havering and Redbridge University Trust (BHRUT) serves a population of 750,000 patients with a large burden of pleural disease. Patients admitted and requiring pleural drainage usually results in a long length of stay of around 7–10 days. Outpatient ambulatory management of undiagnosed and known malignant pleural effusions is increasing nationally in the UK through development of pleural clinics. Previous reports have demonstrated these to be financially efficacious and avoid hospitalisation. We sought to demonstrate that they are also well received and favoured by patients.

**Methods** In December 2015, an outpatient weekly pleural aspiration service was established receiving referrals directly from respiratory outpatients, A&E and acute medicine. We prospectively audited patients attending this service between December 2015 and June 2016. Patients were asked to complete an in-depth questionnaire to assess their experience on the day, any procedural discomfort and attitudes toward such an outpatient service.

**Results** 81 patients attended our service over this period. Median age was 74 (range 30–92), 40% female. 58 patients returned a completed questionnaire. 86% of patients were seen within a week of referral with the rest waiting less than 2 weeks. The majority (74%, n = 43) of patients did not notice any deterioration in their symptoms during this wait. Median pain score was 3 (range 1–10). 78% (n = 45) of patients felt they could continue with their normal activities post procedure. Only 2 patients would have preferred to undergo the procedure as an inpatient citing frailty as the reason. 98% (n = 57) of patients felt that an outpatient pleural service was a good idea. 78% (n = 45) rated the service as excellent, 17% (n = 10) as ‘above average’ and only 5% (n = 3) as ‘average.’

**Conclusions** Outpatient management of pleural effusions is favoured by patients with most rating our service as excellent. Patients are seen promptly with the majority reporting no deterioration in their symptoms during the wait. The procedure is well tolerated and allows patients to continue with their normal daily activities. In addition to important financial benefits of reducing hospital bed-days in patients with pleural effusions, our newly established service has been shown to be beneficial in promoting a positive patient experience.

### M20 PLEURAL SERVICE IN A LARGE UNIVERSITY TEACHING HOSPITAL – 1 YEAR RETROSPECTIVE REVIEW

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**Introduction** Over the last decade, there has been a paradigm shift in the management of both pleural effusions and pneumothoraces. Specialty pleural day-case services have been established offering one-stop clinical assessment, imaging and intervention, with a view to early diagnosis, improved patient care and admission avoidance. We wished to evaluate the pleural service at a large university teaching Hospital.

**Methods** 650 consecutive outpatient episodes presenting to the pleural day-case clinic between January 2015 and January 2016 were reviewed. Patient characteristics, source of referral, diagnosis, interventions and outcomes were evaluated.

**Results** Total number of patient episodes: 650. 264 new outpatients, 322 outpatient follow-ups, 64 pleural in-reach. Male 403 (62%), Female 247 (38%). Referral Source: GP 151 (58%), acute medicine unit/A&E/other specialties 103 (38%) and external referrals 10 (4%).

Pleural Interventions: 27 diagnostic aspirations, 113 therapeutic aspirations, 27 chest drain insertions, 37 indwelling pleural catheters.

Indications for referrals: Pneumothorax: 24, 27 parapneumonic/Complicated effusions, 57 known malignancy, 150 unknown effusions, 8 others.

Average length of stay (based on the BTS Pleural audit 2014)<sup>1</sup> was 8 days. Admission avoidance: 264 patients × 8 days = 2,112 bed days saved in 48 weeks. Early discharge assuming 4 days (66 patients × 4 days) = 264 bed days saved. Total bed days saved = 2376 in 48 weeks – Equivalent of 7 bed days per patient.

**Conclusions** A dedicated pleural service has resulted in improvement in both patient outcomes and experience. The number of unnecessary pleural procedures has reduced. Complicated cases are discussed in Pleural MDT meetings. A recent patient feedback survey conducted over 2 months has shown a highly favourable patient experience of the service itself. The pleural service has allowed the department to recruit to several appropriate NIHR trials. The number of bed days saved is significant, raising the question as to whether a nationwide adoption of pleural services in the majority of trusts, would take some of the strain off of an overburdened NHS.

#### REFERENCE

- 1 Hooper CE, Welham SA, Maskell NA. Pleural procedures and patient safety: a national BTS audit of practice. *Thorax* 2013;**70**(2):189–191.

### M21 PLEURAL EFFUSION SIZE – A RETROSPECTIVE COMPARISON OF COMPUTED TOMOGRAPHY AND ULTRASOUND REPORTING

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**Background** Pleural effusion size may determine patient management and is routinely reported using thoracic computed tomography (CT) and ultrasound scans. We aimed to compare agreement between these two modalities.

**Methods** Between August 2015 and January 2016, patients referred through the pleural service with pleural effusions were