were recorded at baseline, 2 weeks and 3 months. Feasibility outcomes included recruitment, retention and study form completion rates. A patient and carer focus group was held to discuss the intervention and the trial process.

Results Recruitment rate was 50% of those assessed for eligibility (See Figure). Questionnaire completion rates were excellent with very few missing data. 24 participants were male and 38 female. Median age was 63 years (range 18–82).

Participants reported using the information provided, and feedback was positive, particularly highlighting the usefulness of the video clips and self-management information. The most popular pages of the website included diet and lifestyle advice, advice for carers, and symptoms and prognosis. Focus group data reinforced users' positive experiences of the resource and the trial process. Full analysis is ongoing.

Discussion and conclusions We have co-developed a multi-format, accessible information resource that could be made widely available outside of the specialist clinic setting. The BRIEF study suggests larger, definitive studies using interventions to improve understanding, compliance and self-management are warranted. Full results of the feasibility study are expected by December 2016.

Abstract M15 Figure 1

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M16 CONSTRUCT VALIDITY OF THE NEEDS ASSESSMENT TOOL PROGRESSIVE DISEASES FOR INTERSTITIAL LUNG DISEASE (NAT: PD-ILD) PATIENTS

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Background People with ILD, currently have less access to SPC and there is no validated needs assessment tool (NAT). We

adapted the NAT:PD-cancer for use in ILD and conducted psychometric testing.

Aim To test the construct validity of NAT:PD-ILD.

Methods ILD clinicians in four hospitals were trained to use the NAT:PD-ILD. After a consultation, the clinician completed the NAT:PD-ILD, patients completed the St. George's Respiratory Questionnaire (SGRQ-I) and carers completed the Carer Strain Index (CSI) and Carer Support Needs Assessment Tool (CSNAT).

Kendall's Tau-b correlation coefficient (and associated p-value) was calculated to determine the correlation between the NAT: PD-ILD items relating to patient wellbeing, and a total score for a subset of SGRQ-I questions identified *a priori* as measuring similar constructs. The prevalence and bias adjusted kappa (PABAK), Cohen's kappa and percentage of agreement were used to assess whether responses were similar between the NAT: PD-ILD items relating to the ability and wellbeing of the carer and appropriate CSI and CSNAT items which were considered to measure similar concerns/support needs.

Results A total of 68 patients were recruited. The average age of participating patients was 66 years (range 34 to 87) and 62% were male. Forty-five (66%) patients had a carer of whom 27 completed the CSI (mean 4.4, SD 3.0, median 4, range 0–11) and 29 completed at least one item of the CSNAT.

Items 2, 3, 5 and 6 of the NAT: PD-ILD statistically significantly positively correlated with their comparator SGRQ-I scores (ρ range 0.24 to 0.36, $p < 0.05$). PABAK values comparing the NAT: PD-ILD items with appropriate CSI and CSNAT items show most items have PABAK positive values (range from 0.04 to 0.57, with a minimum of 52% agreement). However, NAT:PD-ILD items 11 and 13 have negative PABAK values (Inter-personal relationships and Grief topics – Psychosocial Dimension).

Conclusion The NAT: PD-ILD has adequate construct validity for most domains. However, agreement is poor for physical symptoms and spiritual concerns. This may indicate that clinicians identify concerns with symptoms less well unless they are severe.

M17 LIMITED VALUE OF BASELINE CHEST RADIOGRAPHY IN ADULTS WITH NON-TUBERCULOUS MYCOBACTERIA

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Chest radiographic changes are associated with mycobacterial burden, treatment response and outcome in patients with tuberculosis. There is a paucity of similar data for non-tuberculous mycobacteria (NTM). We describe the chest radiology (CXR) findings in a cohort of adults without cystic fibrosis.

Methods Patients with NTM isolated from respiratory specimens between 2010–2013 at our centre were reviewed. Chest X-rays (CXR) nearest the date of positive NTM culture were read independently by two consultant Radiologists for 5 categories of abnormality (nodules, cavities, bronchiectasis, bronchial wall thickness [BWT] and consolidation) in each of 6 zones. A consensus result was agreed where discrepant. CXR results were recorded as "normal" or "abnormal" overall and for each category per zone. The total number of zones affected in all categories was summed to provide a measure of radiological extent of disease (with a maximum score of 30), e.g. a patient with cavitation in 2 zones and bronchiectasis in 3 would score 5/30. Results

were compared to clinical and microbiological data (including time-to-positivity in liquid culture, TTP).

Results Of 79 patients, 44/79 (56%) were male, median age 63 years [IQR₅₃;75]. CXR was performed median 5-days [IQR₂;28] from sample collection. Inter-rater CXR agreement was 92%, kappa 0.57 [95% CI: 0.52–0.63]. 58/79 (75%) of subjects had an abnormal CXR [Table 1]: half had nodules and BWT, with 41%, 23% and 20% bronchiectasis, consolidation and cavities respectively. Using symptoms present in >1/3 patients, only sputum and difficulty breathing were significantly associated with CXR score ($p = 0.04$; $p = 0.01$). *M. avium* and *M. intracellulare* were the most common NTM isolated [Table 1]. The highest abnormal median score for CXR was for *M. xenopi* (6/30) followed by *M. perigrinum* (5/30), and *M. abscessus* (4.5/30). For *M. kansasii* there was significant correlation between CXR score and TTP ($r = -0.82$; $p = 0.01$) with cavitation being associated with a significantly lower TTP (4.5 vs 17.5 days; $p = 0.03$). CXR score did not predict whether or not a patient started treatment (OR 1.07; $p = 0.40$).

Conclusion CXR abnormalities were present in 75% of patients in whom NTM was isolated. Unlike *M. tuberculosis*, the extent of radiographic changes correlated poorly with clinical symptoms or mycobacterial burden. Better simple, repeatable measures of NTM disease severity are required.

Abstract M17 Table 1 Numbers of non-tuberculosis mycobacteria (NTM) isolates with numbers and proportions of abnormal chest-x-rays (CXR), median CXR scores, median time to culture positivity (TTP) and whether treated (Rx)

NTM	N (%)	Abnormal CXR N (%)	Median CXR score	Median TTP (days)	Rx
<i>M. avium</i>	24 (30)	20 (25)	3.5	8	5
<i>M. intracellulare</i>	13 (16)	12 (15)	5	13.5	2
<i>M. fortuitum</i>	12 (15)	7 (9)	4	9	0
<i>M. kansasii</i>	8 (10)	4 (5)	2	6.5	3
<i>M. chelonae</i>	5 (6)	3 (4)	3	9	0
<i>M. peregrinum</i>	4 (5)	4 (5)	5	10	0
<i>M. goodii</i>	4 (5)	0 (0)	0	29	0
<i>M. xenopi</i>	3 (4)	3 (4)	6	24	1
<i>M. mucogenum</i>	2 (3)	2 (3)	2	12.5	0
<i>M. abscessus</i>	2 (3)	1 (1)	4.5	5	0
<i>M. palustre</i>	1 (1)	1 (1)	0	14	0
<i>M. vulneris</i>	1 (1)	1 (1)	4	–	1

M18

ENHANCED TRAINING FOR MEDICAL REGISTRARS LEARNING CHEST DRAINS AND THORACOCENTESIS. UNDERSTANDING TOTAL COMPETENCY LEVEL IN THE WORK FORCE

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Performing a chest drain procedure with a safe technique is a core skill for a medical registrar and arguably the highest risk procedure they are expected to perform at junior level.

The competency level of a cohort of registrars who typically rotate every six months is often not known. Little regard is given

- Level 1 The trainee has insufficient knowledge and/or skill to perform the procedure
- Level 2 The trainee may perform the procedure under supervision
- Level 3 The trainee may perform this procedure independently under exceptional circumstances
- Level 4 The trainee may perform this procedure independently
- Level 5 The trainee is suitable to supervise others in performing the procedure
- Not assessed

Abstract M18 Figure 2 Seldinger competence

to this when drawing up on call rotas and training needs are often missed. In this initiative we aimed to address these failings.

Methods By way of induction for the general medical registrars beginning a six month post in our hospitals we arranged a short verbal introduction to the group about local processes of how chest procedures within our hospital are performed eg. location of equipment in centralised packs, standardised equipment lists, check lists and use of bedside US and patient information/consent.

Over the first two weeks of the run we arranged “one on one” teaching with a Consultant chest physician who taught each registrar according to their needs on realistic mannequins. Three techniques taught: thoracocentesis with an 8 F drainage pack; a small bore 12 F seldinger drain and a surgical 28 F drain drain according to need. Teaching of 32 registrars was completed within a two week time frame in the space of four PA/clinic sessions. Competency was judged at the end of the session and electronic DOPS and feedback from the registrars was obtained. We encouraged further discussion with educational supervisors with regard to ongoing training requirements for individuals.