Background Early detection and treatment of lung cancer through low-dose computed tomography (LDCT) screening reduces lung cancer mortality. Undiagnosed interstitial lung disease (ILD) can be incidentally detected on LDCT, but whether this leads to improved clinical outcomes is unclear.

Methods The West London lung screening pilot invited ever-smokers aged 55–75 for a lung health check, and LDCT for those meeting a prespecified lung cancer risk score. LDCTs were reported by 5 consultant thoracic radiologists with ≥ 8 years thoracic CT experience. Participants without known ILD and with (i) $>10\%$ interstitial lung abnormalities (ILAs) as defined by the Fleischner Society on LDCT (ii) 5–10% ILAs on LDCT and restrictive spirometry (pre-March 2020), (iii) ILAs $>5\%$ (without spirometry post-March 2020), (iv) progressive ILAs on serial imaging performed after 12–24 months, were referred for clinical evaluation to the ILD Unit at the Royal Brompton Hospital. Diagnoses were assigned after multidisciplinary team (MDT) discussion.

Results ILAs of $>5\%$ extent on LDCT were identified in 39/1853 (2.1%) subjects screened between August 2018 and April 2021 (table 1). Respiratory symptoms were present in 18/39 (46.1%) and crackles were auscultated in 17 of 22 subjects

(77.3%) undergoing physical examination. Past exposure to potential environmental triggers was noted in 21/39 (53.8%). Diagnostic bronchoalveolar lavage was performed in 7/39 (17.9%) and one patient underwent transbronchial lung cryobiopsy. After MDT discussion, ILD was concluded in 31/39 (79.5%) cases, of which 14/31 (45.2%) were diagnosed with IPF. In the IPF subgroup, antifibrotics were initiated in 7/14 (50%) of cases. In those diagnosed with other ILDs, immunomodulatory treatment was initiated in 2/25 (8%) subjects.

Conclusion A large proportion of individuals with newly identified ILAs have an abnormal clinical examination and respiratory symptoms, consistent with the widely held suspicion that ILD is underdiagnosed in the community. Lung cancer screening in this demographic provides a unique opportunity to address this unmet health metric. Earlier identification of ILD, specifically IPF, allows institution of antifibrotic therapies proven to modify the natural history of the disease by preserving lung function and extending life. The cost-effectiveness of this approach for ILD screening warrants detailed evaluation.

P5

HOW SHOULD PATIENTS WITH INTERSTITIAL LUNG ABNORMALITIES BE EVALUATED AND MONITORED? EXPERIENCE FROM A SECONDARY CARE INTERSTITIAL LUNG DISEASE CLINIC

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Introduction Interstitial lung abnormalities (ILA) have been defined as incidental radiological parenchymal abnormalities without clinical suspicion of interstitial lung disease (ILD)¹. It is recognised that they are clinically important due to increased risk of pulmonary fibrosis, exercise impairments and mortality. A recently published Fleischner Society position paper described three subcategories of ILA¹; non-subpleural, subpleural non-fibrotic and subpleural fibrotic. Little is known about the real world management of these patients.

Methods We performed a retrospective analysis of an ILD database containing 1298 patients covering a population of 820,000.

Results 55 patients with ILA were identified (61.8% male, median age 75 (IQR 69.5–79), current or ex-smokers 70.9%). 33/55 (60%) were categorized as subpleural fibrotic, 15/55 (27.2%) as subpleural non-fibrotic and 7/55 (12.7%) as non-subpleural. Baseline pulmonary function showed a mean (S.D.) FVC% predicted of 98.76% (± 19.94) and TLC% predicted of 59.45% (± 23.45).

42/55 (76.3%) patients were followed up and 13/55 (23.7%) were discharged with safety netting after initial consultation. A further 26 were discharged after a period of follow up (mean (S.D.) 18.5 (26.3) months). 16/55 (29.1%) remain under active follow up, mean duration 22.3 months. 1 patient was re-referred after discharge.

11 (20%) patients died within 3 years of ILA identification. In those who died, there was no significant difference in age, co-morbidities or baseline pulmonary function compared to survivors. Cause of death was known in 7/11, one caused by lung cancer, none by ILD. 6/42 (14.3%) reported worsening respiratory symptoms during the follow-up period. 27/42 patients had serial pulmonary function available at 12 months, of which 3 (11.1%) had $>10\%$ decline in FVC. 23 had repeat

Abstract P4 Table 1 Characteristics of the subjects

Characteristics	Subjects with ILAs on LDCT (n = 39)
Age, yr, mean ($\pm$ SD)	68.8 ($\pm$ 4.3)
Gender, n (%)	
Female	15 (38.5)
Male	24 (61.5)
Smoking status, n (%)	
Current	7 (17.9)
Ex	32 (82.1)
Respiratory symptoms, n (%)	
None	19 (48.7)
Cough	3 (7.7)
Dyspnoea	9 (23.1)
Cough & dyspnoea	6 (15.4)
N/A	2 (5.1)
Physical examination findings, n (%)	
None	5 (12.8)
Crackles	17 (43.6)
N/A	17 (43.6)
Baseline lung function, %pred, median (range)	
FEV1, % pred	91 (58 – 130)
FVC, % pred	94.8 (65 – 143)
TLco, % pred	57.6 (28.4 – 98.8)
Kco, % pred	79.5 (36.4 – 94)
MDT Diagnosis	
ILAs, n (%)	8 (20.5)
ILD, n (%)	
IPF	14 (35.9)
Smoking-related ILD	6 (15.4)
Hypersensitivity pneumonitis	4 (10.3)
PPFE	3 (7.7)
Sarcoidosis	1 (2.6)
Post-COVID ILD	1 (2.6)
Vasculitis	1 (2.6)
Unclassifiable	1 (2.6)
Treatment, n (%)	
Smoking cessation advice	6 (15.4)
Antifibrotic	7 (17.9)
Immunomodulatory treatment	2 (5.1)
None	23 (59)

CT imaging within 3 years of which 7 (30.4%) showed radiological progression. 1 patient progressed to ILD.

Conclusions The majority of patients had subpleural fibrotic ILA. Based on our findings that a significant number of patients had evidence of disease progression over follow-up period, we recommend that patients with ILA should be monitored annually with serial pulmonary function with clinical review if symptomatically deteriorating.

REFERENCE

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P6

TELEHEALTH FOR PATIENTS WITH INTERSTITIAL LUNG DISEASES (ILD): RESULTS OF AN INTERNATIONAL SURVEY OF CLINICIANS

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Introduction Clinicians and policy makers are promoting widespread use of home technology and spirometry to detect disease progression for patients with ILD; the COVID-19 pandemic has accelerated this. Data on the potential utility of telehealth in ILD is limited.

Aim This survey investigated clinicians' opinions about methods and practices used to monitor disease progression in patients with ILD using telehealth.

Methods Clinicians were invited to participate in a cross-sectional survey (SurveyMonkeyTM) of 13 questions designed by an expert panel. Telehealth is defined as home monitoring of symptoms and physiological parameters with regular automatic transmission of data from the patient's home to the clinicians. Data are presented as percentages of respondents.

Results A total of 207 clinicians from 23 countries participated in the survey. A minority (81, 39%) reported using telehealth, but of those using telehealth, a total of 41 answered the question asking if telehealth was effective. The majority (n= 32, 78%) believed it to be quite or more effective. Higher telehealth use was observed in Europe (n=94, 45%) than Asia (n=51, 25%) and America (24%). Clinicians reported the most useful telehealth monitoring technologies were smartphone app (59%) and wearable sensors (30%). Telehealth was most frequently used for monitoring disease progression

Abstract P6 Figure 1 Clinicians' opinions about methods and practices that are being used to monitor disease progression in patients with ILD using tele-health

(70%), quality of life (63%), medication use (63%) and reducing the need for in-person visits (63%). Clinicians reported most often monitoring symptoms (93%), oxygen saturation (74%) and physical activity (72%) (Figure 1). The equipment perceived most effective were spirometer (43%) and pulse oximeters (33%). The primary barriers to clinicians' participation in telehealth were technical (47%), training (45%), and organisational structure (43%). Clinicians considered that patients' barriers to participation might include lack of awareness (60%), lack of knowledge using smartphones (49%), and lack of confidence in telehealth (44%).

Conclusion A minority of ILD clinicians completing this survey used telehealth to monitor patients, but of those who did, there was some support for clinical utility. Our findings emphasise the need for robust research in telehealth as a mode for the delivery of healthcare services for ILD and highlight the need to assess patients' perspectives to improve telehealth experiences in ILD patients.

P7

REMOTE FRAILTY ASSESSMENT AND PREVALENCE OF FRAILTY IN OLDER OUTPATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS

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Introduction Idiopathic Pulmonary Fibrosis (IPF) patients are older with impaired physiology, and therefore at risk of frailty syndromes including falls, immobility, and toxicity from polypharmacy. Frailty correlates with quality of life, hospital admissions, and mortality.¹ IPF outpatients would benefit from their clinicians receiving training in frailty identification, to facilitate early referral to frailty services and targeted interventions to reduce admissions and mortality.

Objectives

1. Can respiratory clinicians identify frailty remotely in outpatients with IPF from the electronic patient record (EPR)?
2. What is the prevalence of frailty in older IPF patients in one ILD clinic?

Methods We identified older outpatients with IPF from one clinic, who were alive and aged >65 years in May 2021. Clinicians were trained by a consultant geriatrician to determine the Clinical Frailty Scale (CFS) score retrospectively for IPF patients remotely from the EPR using a validated method.² Demographic, physiologic and lung function data were also collected from EPR. GP summary care records were reviewed for frailty coding to supplement hospital records.

Results See table 1. 11/29 patients were vulnerable (CFS=4). A further 18/29 patients were mild or moderately frail (CFS 5–6). None expressed features of advanced frailty (CFS =7). Another surrogate marker of frailty, weight loss ≥ 5% was evident in 14/29 (average weight loss 5kg (7%) between diagnosis and latest clinic follow up).

Conclusions Respiratory clinicians could determine CFS in all identified IPF outpatients using the EPR. We plan to validate these data with face to face frailty assessments performed by the frailty service when available. We had insufficient data to correlate frailty score with IPF severity. Our findings provide a basis for inter-disciplinary frailty training and education