Abstract P123 Table 1 Summary of mean values Pre-PR, Post-PR and change after PR for ISWT and SGRQ

		ILD patients (n = 21)	Whole cohort (n = 344)
ISWT	Pre-PR	197.62	202.48
	Post-PR	254.29	266.25
	Change	56.67	63.77
SGRQ symptoms	Pre-PR	50.48	60.77
	Post-PR	39.15	55.23
	Change	11.90	5.54
SGRQ activity	Pre-PR	69.14	70.34
	Post-PR	66.70	66.61
	Change	2.90	3.71
SGRQ Impact	Pre-PR	34.95	39.66
	Post-PR	34.55	34.44
	Change	1.40	5.22
SGRQ Total	Pre-PR	48.00	52.42
	Post-PR	44.90	47.71
	Change	3.85	4.71

Discussion Examination of data available demonstrates that patients with ILD achieve the minimum important difference of the ISWT (>47.5 m) and were close to achieving the minimum important difference of the SGRQ (>4). ILD patients have a greater benefit in terms of reduction in symptoms as measured by SGRQ, than the cohort as a whole. Limitations to generalisation of conclusions due to small sample size are acknowledged.

Conclusion ILD patients who completed a 6-week community based, PR programme within a mixed respiratory disease cohort demonstrate a clinically significant improvement in exercise capacity and make gains in health related quality of life.

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DO WE NEED A PRACTICE INCREMENTAL SHUTTLE WALK TEST FOR PATIENTS WITH INTERSTITIAL LUNG DISEASE REFERRED FOR PULMONARY REHABILITATION?

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Background Patients with Interstitial Lung Disease (ILD) are more frequently being referred to Pulmonary Rehabilitation (PR) where exercise capacity is measured, often by an Incremental Shuttle Walk Test (ISWT). These patients are frequently limited by severe dyspnoea and exertional desaturation. Available guidelines¹ suggest two ISWTs are needed, however this can be time consuming.

Objective To investigate if a practice ISWT is needed for patients with ILD referred to PR.

Methods Patients with ILD recorded on our PR database, who attended a PR assessment and performed 2 ISWTs,¹ were selected. Patients were included if they had 2 recorded ISWTs using the same oxygen prescription and mobility aid (if any) between tests and provided written consent. Hospital notes were retrieved, diagnosis confirmed and relevant data extracted and validated.

Abstract P124 Figure 1 Bland-Altman plot showing agreement between the two ISWTs

Results 43 patients (24 male) were included, 18 with Idiopathic Pulmonary Fibrosis. Participants were mean (SD) 72.17(10.54) years, Forced Vital Capacity was 2.28(0.87)l [77.24(25.46)% predicted], Transfer factor for the Lung for Carbon Monoxide 3.60(1.07)ml/mmHg [44.79(12.80)% predicted], median (interquartile range) Medical Research Council dyspnoea grade 3.5 (3–4) and 29 used oxygen therapy.

Participants achieved 165.12(123.89)m on ISWT1 with post-SaO₂ 87.86(5.86)%, heart rate 97.03(14.71), Borg breathlessness 4(3–5) and Rated Perceived Exertion (RPE) 13(11.25–15). There was a change of 28.84(31.71)m between the two ISWTs ($p < 0.001$); 72.1% of patients walked further on their second ISWT. Backward linear regression only explained 42% of this variance (R^2 . 426).

For those who did not improve, ISWT1 was ≤ 210 m. Bland-Altman plot showed good agreement between the ISWTs, however the limits of agreement were wide. There was a significant difference in Endurance Shuttle Walk Test levels when calculated at 85% of VO₂ peak as estimated from ISWT1 and ISWT2 ($p < 0.001$).

Conclusions For patients with ILD, we have shown that there are significant differences between the first and second ISWT and therefore a practice ISWT is needed in order to accurately assess exercise capacity, prescribe an exercise programme and ensure services and interventions are correctly evaluated. We were unable to predict those who did not need to complete 2 ISWTs.

REFERENCE

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THE IRISH LUNG FIBROSIS ASSOCIATION'S 2000 STEPS A DAY CHALLENGE: A PILOT STUDY TO EVALUATE A NOVEL HOME EXERCISE PROGRAMME FOR LUNG FIBROSIS PATIENTS

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