30.2% (n=16) were current smokers, with a mean Medical Research Council (MRC) breathlessness grade 3) (table 1).

Of those assessed 48.15% (n=26) completed, of those who started (n=36) 72.22% completed. Only the HADS anxiety domain demonstrated a clinically significant improvement in mean score post VPR (table 1). The COPD PREM 9 does not have an MCID, however completion of VPR lead to a mean improvement in score of 2.35.

Conclusion Completion of an inner City London VPR programme did improve levels of anxiety and improved patient experience of living with disease, clinically significant improvements in exercise tolerance or symptom burden were not demonstrated. VPR provided a solution for delivering PR during the pandemic, however greater comparison against traditional face to face PR models is required to ensure it delivers the same healthcare and patient outcomes.

P67 **PILOT PROJECT: FEASIBILITY OF MINIMAL-EQUIPMENT HIGH-INTENSITY INTERVAL EXERCISE (HIIE) INTERVENTIONS IN BRONCHIECTASIS PATIENTS**

¹KF Parrott, ²D Taylor, ³A Jenkins, ⁴A Jones. ¹United Lincolnshire NHS Trust, Lincoln, UK; ²University of Lincoln, Lincoln, UK; ³University of Nottingham, Nottingham, UK; ⁴Monash University, Melbourne, Australia

10.1136/thorax-2021-BTSabstracts.177

Introduction Minimal-equipment interval-type interventions offer a cost-effective way to improve the exercise adherence, fitness, and symptoms of bronchiectasis patients in the home setting. Of the approaches this might include, stair and walking-based high-intensity interval exercise (HIIE) have emerged as potentially safe, practical, and time-efficient methods for use by previously untrained and clinical populations in the home. However, the feasibility of using these methods to prescribe HIIE safely and effectively to bronchiectasis patients is yet to be explored.

Methods Following baseline physiological assessment (6MWT, CST, IQST) five non-cystic fibrosis bronchiectasis patients (2 men, 3 women, 68 ± 5 years) completed four differing step or walking-based HIIE formats in a randomised order across four supervised trials. HIIE sessions comprised of either 3 x 20 sec 'all out' stepping, 3 x 60 sec 'vigorous' stepping, 3 x 60 sec 'all out' walking, or 3 x 180 sec 'vigorous' walking. Patients were then asked to complete 6 weeks of unsupervised home-based HIIE, choosing their preferred HIIE format on 3 days per week, after which baseline physiological assessments were repeated.

Results No adverse events were reported and all HIIE formats were tolerated by patients (mean heart rate and ventilation across formats: 78 ± 5% HR_{max} and 35.4 ± 10.0 L·min⁻¹, respectively). Patients successfully completed 3.1 ± 0.5 sessions per week of unsupervised home-based HIIE. The most popular format was 3 x 60 sec of 'all out' walking, which comprised 46% of all sessions completed. Paired samples t-tests showed home-based HIIE significantly improved 6MWT (483 ± 79 vs 574 ± 58 m, p <.05) and CST (23 ± 5 vs 28 ± 4 ml·kg·min⁻¹, p <.05) outcomes.

Conclusion This data suggests step and walk-based HIIE is feasible, safe, well tolerated and effective for bronchiectasis patients. The engagement and enjoyment reported by patients suggests HIIE may offer an effective approach for prescribing unsupervised exercise to bronchiectasis patients, particularly

when such prescription incorporates different choices of HIIE format. We therefore plan to investigate the effectiveness of these approaches to HIIE in a fully powered clinical trial and subsequently compare the benefits to other commonly prescribed formats of exercise.

P68 **A RETROSPECTIVE SERVICE EVALUATION OF A VIRTUAL RESPIRATORY PHYSIOTHERAPY OUTPATIENT CLINICAL SERVICE**

S Parkin, A Long, I Forsy, R Allen. St Bartholomew Hospital, London, UK

10.1136/thorax-2021-BTSabstracts.178

Aim To review the effectiveness of a virtual service delivery for Airway Clearance in a chronic respiratory population.

Methods A retrospective audit of virtual provision of Airway Clearance to a respiratory outpatient population. Patient's attendance and outcomes were reviews

Results 47 patients (36% male, mean (SD) age 57 (16) were referred to the respiratory outpatient physiotherapy service for ACT between March 2020–2021.

70% had a diagnosis of bronchiectasis. 87% attended appointments virtually with 74% via video call. To establish an effective ACT it took 2 appointments of 30 minutes. Figure 1 describes ACT taught. 5% (2) of patients did not have English as their first language, requiring advocates to translate. Of those who attended virtually, 1 patient was admitted to hospital within 3 months of being discharged from the service with an infective exacerbation of bronchiectasis.

6% (3) declined a virtual consultation with their main reason being access to technology. 60% (2) were male with an average age of 46. Our DNA rate was 18%.

Discussion Our findings indicate that virtual clinics are feasible for respiratory assessments and teaching an ACT. Patients could be taught different types of ACT within a few appointments, with no adverse events. The impact of the COVID pandemic resulted in changes to outpatient services with an immediate effect. Therefore patients had limited choice on their appointment type and so it is difficult to compare these outcomes to face to face clinics from previous years. This change in practice did overcome other historical barriers prior to the pandemic ie. Travel distance and cost and infection control. Admission rates may have been lower due to shielding, resulting in reduced exposure. They do not reflect exacerbations managed at home via GP's.

Further work is required to identify the long term carry over and effectiveness of these treatments. Qualitative data on patient's perceptions of a virtual clinic would guide any long term changes to the service.

Conclusion Virtual outpatient clinics for respiratory physiotherapy are feasible. The change in service design may

Abstract P68 Figure 1

	total virtual and telephone	%	virtual	telephone
Number taught acapella	24	58%	22	2
Number taught ACBT	16	40%	12	4
Number taught other	1	2%	1	0