OSA group compared with not OSA along with higher AHI and ODI. The BMI were similar between the two groups and there was no difference in the ESS. We then compared the symptoms of initiation and maintenance insomnia between the two groups. 75% of patients with confirmed diagnosis of OSA experienced insomnia symptoms. We found that there was no difference in symptoms of time to get to sleep, difficulty to get to sleep and difficulty to remain asleep between those with OSA and those with no evidence of OSA. (see table 1).

Conclusion This suggests there is a large proportion of patients presenting to our service with difficulty falling or staying asleep. There are a similar proportion of patients describing these initiation and maintenance insomnia symptoms in those diagnosed with OSA compared to those where OSA was excluded.

P63 ASSESSING WHICH PATIENT RELEVANT FEATURES OF AN OSCILLATING POSITIVE EXPIRATORY PRESSURE (OPEP) DEVICE ARE MOST IMPORTANT IN THE REAL WORLD – RESULTS FROM AN INDEPENDENT CLINICAL ASSESSMENT IN UK

A Bracey, J Suggett. *Trudell Medical International, Hampshire, UK*

10.1136/thorax-2021-BTSabstracts.173

Introduction and Objectives OPEP devices can be used to manage a number of different respiratory conditions by providing airway clearance therapy to mobilize and clear excess mucous from the lungs. This assessment investigated the relative importance of a number of different patient relevant features when selecting an OPEP device.

Methods The survey was completed, as part of an independent clinical assessment of an OPEP device (Aerobika*, Trudell Medical International), across 23 UK centres by respiratory physiotherapists. They were asked to note, for each patient, the respiratory condition being managed and to select which device features would be important when selecting an OPEP device for that patient. Up to fourteen different features could be selected and these covered topics related to a) ease of use/cleaning, b) clinical adaptability/evidence and c) device robustness/quality.

Results Data related to 156 individual patients was collected, covering CF, bronchiectasis and COPD conditions. The most important features noted were generally related to device ease of use and associated attributes. These were highest overall and for each specific respiratory condition. Orientation independence and the ability to easily take apart and clean were identified specifically as high rating factors. When the data was analysed by respiratory condition and the top 5 features compared, there was generally agreement across different conditions, although interestingly the attribute 'clinically proven' was of a greater relative importance when selecting for COPD and bronchiectasis patients than for CF and the ability to use at low expiratory flows was higher rated for COPD than the other two conditions.

Conclusions In conclusion, the results reflect the pragmatic and clinically relevant perspective of selecting a device that a patient can easily use and therefore is more likely to use in the real world.

Please refer to page A192 for declarations of interest related to this abstract.

P64 PREVALENCE OF BREATHING PATTERN DISORDERS WITH CHRONIC REFRACTORY COUGH AND THE OUTCOMES OF PHYSIOTHERAPY MANAGEMENT

[1]R De Vos, [2]H Rupani, [1]T Brown, [1]L Fox, [1]L Wiffen, [1]AJ Chauhan. *[1]Portsmouth Hospitals University NHS Trust, Portsmouth, UK; [2]University Hospital Southampton NHS Trust, Southampton, UK*

10.1136/thorax-2021-BTSabstracts.174

Background Chronic refractory cough (CRC) is described as a cough that persists despite guideline-based treatment. Once medical management is optimised the mainstay of treatment is to reduce upper airway hypersensitivity. The prevalence of breathing pattern disorders (BPD) with CRC is increasingly recognised and treatment by specialist respiratory physiotherapists (SRP) aims to reduce symptom burden.

Objectives

- To determine the prevalence of comorbid BPD with CRC.
- To assess improvement in cough following SRP input.

Methods We reviewed 34 patients (79.4% female) with CRC referred to a SRP over a 6 month period. Patients were assessed for BPD and treatment included breathing pattern retraining alongside cough management and suppression techniques. Cough severity and impact of cough on quality of life (QOL) was scored on a 10-point visual analogue scale (VAS) pre and post treatment.

Results

- Average length of CRC was 7.8 years (range 1–25 years)
- Patients were reviewed by the same SRP an average of 3 times (range 2–5)
- 33/34 (97%) had a comorbid BPD as assessed by the SRP
- 31/34 completed treatment with 28/31 (90%) reporting improvement in symptoms

Abstract P64 Table 1

	Pre SRP intervention	Post SRP intervention	P value
VAS score for Cough severity (median, range)	6, 3–10	2, 0–10	<0.0001
VAS score for QOL related to cough (median, range)	6, 0–10	2, 0–7	<0.0001

Conclusion BPD commonly coexists with CRC.

SRP intervention in patients with CRC improves symptoms and quality of life related to cough.

SRP should therefore be an integral part of a CRC clinic, with routine assessment for BPD carried out.

P65 REMOTE DELIVERY OPTIONS FOR SELF-MANAGEMENT PROGRAMMES FOR PATIENTS WITH COPD DURING THE COVID-19 PANDEMIC. UPTAKE, COMPLETION AND CLINICAL OUTCOMES

[1,2]L Houchen-Wolloff, [1]S Ward, [1]EJ Chaplin, [1]NY Gardiner, [1,2]SJ Singh. *[1]University Hospitals of Leicester, Leicester, UK; [2]University of Leicester, Leicester, UK*

10.1136/thorax-2021-BTSabstracts.175

Introduction Face-to-face pulmonary rehabilitation (PR) programmes were largely stopped in the UK in March 2020 due

to concerns about the transmission of the COVID-19 virus. However there was still a need to support patients with COPD to self-manage their condition. Indeed social isolation and deconditioning were cause for concern in this population. The aim of this work was to gauge the appetite for 3 different models of remote self-management support and to explore the uptake, completion and clinical outcomes of these 3 options.

Methods Between March 2020- March 2021, 3 remote options for self-management were offered: telephone support (TP: biweekly for 6weeks with home exercise and education booklet), SPACE for COPD Manual (SM: with phone calls at week 2 and week 4), SPACE for COPD Website (SW: email prompts and contact health professional function). All patients had a subjective assessment (including risk assessment) completed over the phone. All programmes included self-management education and a home exercise programme (walking, strength exercises using free weights). Outcomes assessed were: uptake and completion rates, COPD Assessment Test (CAT), Chronic Respiratory Questionnaire (CRQ)- all domains.

Results N=287 patients chose a remote option and were included in the analysis. All patients had a spirometry diagnosis of COPD. Mean (SD) age 66.4 (10.2) years. 67% chose TP, 22% chose SM, 11% chose SW. Completion rates were: 56% TP, 52% SM and 30% SW (significant $p<0.05$ between TP and SW). Table 1 displays the change in outcomes for the 3 choices. There were within group improvements for all outcomes, all meeting the clinically relevant thresholds in this population (except for the CRQ-fatigue and emotion domains in the TP group). There were statistically significant changes in a number of outcomes (*) but no between group differences.

Abstract P65 Table 1

Change in…	TP	SM	SW
CAT	-2.4 * C	-3.1 * C	- 7.2 C
CRQ- Dyspnoea	0.8 * C	0.5 * C	1.1 * C
CRQ- Fatigue	0.4 *	0.8 * C	0.9 C
CRQ- Emotion	0.4 *	0.8 * C	1.4 C
CRQ- Mastery	0.6 * C	0.5 C	0.8 C

*: Statistically significant $p<0.05$
C: clinically relevant (meets MCID for this population)

Conclusion Most patients chose bi-weekly telephone support, TP and SM had the highest completion rate. All options were equally effective in terms of clinical outcomes. Despite being clinically effective, more work is needed to promote completion in digitally delivered self-management programmes.

P66 DOES AN INNER CITY LONDON VIRTUAL PULMONARY REHABILITATION PROGRAMME PRODUCE CLINICALLY SIGNIFICANT IMPROVEMENTS IN PATIENT OUTCOMES?

LM Graham, K Barr, AB Kenward. *Homerton University Hospital NHS Foundations Trust, London, UK*

10.1136/thorax-2021-BTSabstracts.176

Background The COVID-19 pandemic led to the suspension of Pulmonary Rehabilitation (PR) across the United Kingdom (UK). Services had to rapidly redesign to deliver rehabilitation within new limitations. As per many PR services the Adult Cardiorespiratory Enhanced and Responsive (ACERS) switched to deliver PR virtually, adapting the face to face programme to a virtual model. Patient outcomes were then analysed to see if they were clinically significant, achieving the minimal clinical important difference (MCID) and could offer a comparable alternative to face to face PR.

Method Following a comprehensive remote subjective assessment, patients attended a face to face objective assessment completing two incremental shuttle walk tests, the Chronic Obstructive Pulmonary Disease (COPD) Assessment Test (CAT), COPD Patient Reported Experience Measure 9 (COPD PREM 9), and the Hospital Anxiety and Depression Scale (HADS).

The virtual PR (VPR) programme ran twice weekly for six weeks, with a cohort of six patients and delivered was by a Physiotherapist and Rehabilitation Assistant over Microsoft Teams. The one and half hour programme contained cardiovascular, upper and lower limb strengthening exercises, modified from the face to face programme followed by an education session. Outcomes were then analysed to see they were clinically significant.

Results In total 53 patients started VPR during 2020/21, 62.26% (n=33) female, mean age 60, 62.3% (n=33) COPD,

Abstract P66 Table 1 Patient demographic data of those patients assessed and completed the Virtual PR programme

Patient demographic (n=53)			
Female (%)	33 (62.3%)		
Smoker (%)	16 (30.2%)		
Non Smoker (%)	8 (15.1%)		
Age (years) (range)	60 (37 to 81)		
Primary Disease			
COPD	33 (62.3%)		
Asthma	10 (18.9%)		
Other (bronchiectasis, ILD, lung cancer)	10 (18.9%)		
FEV1/FVC ratio	0.68		
FEV1% predicted	66.08% (20 to116%)		
MRC (Range)	3 (1 to 5)		
Outcomes			
	Pre (n=53)	Post (n=26)	Mean change
ISW (m) (range)	297.14m (40 to 1020 m)	382.66m (80m to 650m)	31.25m (-80m to +110m)
CAT (range)	23.73 (8 to 36)	19.83 (5 to 32)	1.26 (-13 to +11)
COPD PREM 9 (range)	19.20 (0 to 32)	16.31 (3 to 34)	2.35 (-18 to +21)
HADS A (range)	9.56 (0 to 21)	8.13 (1 to 18)	1.56 (-18 to +11)
HADS D (range)	8.51 (1 to 14)	7.54 (1 to 18)	0.86 (-7 to +9)

Key: COPD: Chronic Obstructive Pulmonary Disease (COPD), ILD: Interstitial Lung Disease, FEV1: Forced expiratory Volume in one second, FVC: Forced Expiratory Volume, MRC: medical research council breathlessness scale, ISW: Incremental Shuttle Walk Test; CAT: COPD Assessment Test, COPD PREM: Chronic Obstructive Pulmonary Disease Patient Reported Experience Measure 9; HADS: Hospital Anxiety and Depression Scale: A: anxiety domain, D: depression domain