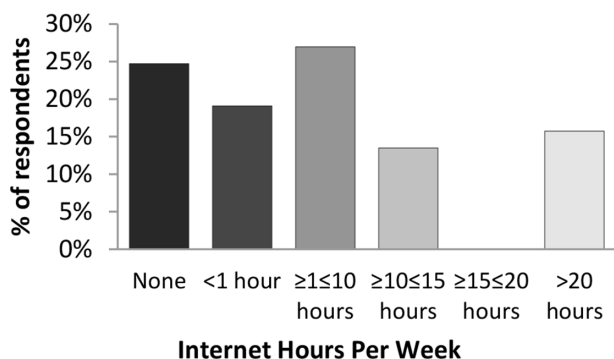


**A bar chart to show the reported hours of internet usage per week in the Pulmonary Rehabilitation population**



**Abstract P80 Figure 1**

spent on the internet per week (ICC -0.29,  $p=0.006$ ). There was also a weak correlation between those who reported having qualifications and hours spent on the internet (ICC 0.34,  $p=0.009$ ).

Overall, hospital face-to-face (55.1%) was preferred to other PR delivery interventions (home booklet and telephone 18.0%, community face-to-face 13.5%, web programme-based 5.6%, virtual classes 2.2%). No responders who used the internet infrequently (<1 hour/week) listed internet-based interventions as preferable.

**Conclusion** Despite having access (76.4%), only a small group of patients would prefer rehabilitation delivered via web programme or virtual classes (10.3% of the 76.4%). This presents challenges for implementing online interventions such as virtual classes for the wider PR population, however, may be useful for selected groups of patients.

**REFERENCES**

- Chaplin E, Hewitt S, Apps L, Bankart J, Pulikottil-Jacob R, Boyce S, Morgan M, Williams J. and Singh S, 2017. Interactive web-based pulmonary rehabilitation programme: a randomised controlled feasibility trial. *BMJ Open*, **7**(3).
- Polgar O, Aljishi M, Barker R, Patel S, Walsh J, Kon S, Man W and Nolan C, 2020. Digital habits of PR service-users: implications for home-based interventions during the COVID-19 pandemic. *Chronic Respiratory Disease*, **17**.

P81

**THE FEASIBILITY AND ACCEPTABILITY OF DELIVERING VIRTUAL PULMONARY REHABILITATION DURING THE COVID-19 PANDEMIC**

A Lound, BC De Luca, ZA Kennedy, MC Maguire, E Goodman, K Shavji, RL Spurway, L Hinkins, V Padmanaban, V Mak, SL Elkin. *Imperial College NHS Healthcare Trust, London, UK*

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**Introduction** Pulmonary Rehabilitation (PR) services have been unable to provide face-to-face PR due to covid-19. Our service developed a virtual PR (VPR) programme and sought to understand its feasibility and acceptability.

**Methods** Our PR programme was adapted to an online format in conjunction with patients. Multiple video conferencing platforms were trialled with both clinicians and patients preferring Zoom. Exercise intensity was pragmatically prescribed using the BORG scale. One clinician demonstrated exercises and

another provided feedback. Education consisted of facilitated group discussions.

We recruited patients from PR classes and waitlists. One-to-one assessments took place over a video platform (AccuRx). Exercise capacity was assessed using the 1-minute sit to stand (1STS). Health status was measured using the Chronic Respiratory Disease Questionnaire (CRQ) and COPD Assessment Test (CAT). Other measures included the Hospital Anxiety and Depression scale (HADS) and Lung Information Needs Questionnaire (LINQ). We collected patient and clinician feedback.

**Results** We screened 58 patients for VPR- 18 (31%) accepted, 21 (36%) were unsuitable (20-unwell, 1- language barrier), 19 (33%) had no internet access or declined. The participants (10 male) had an average age of 69 years (37–84). Respiratory pathology included COPD (11), Asthma (3), Bronchiectasis (2) and Interstitial lung disease (2). Average MRC was 3 (2–4) and FEV<sub>1</sub>66% (29%–114%).

We undertook VPR in 3 cohorts (2x/week for 6 weeks). 18 (100%) patients completed. No adverse events occurred. Over 50% of patient’s achieved the MCID for exercise capacity, health status (CRQ) and learning needs (see figure 1).

10 patients responded to our post-VPR survey. 100% found VPR beneficial with 80% stating Zoom was ‘very easy’ or ‘easy to use’. Benefits included reduced social isolation, not having to travel and confidence in home-based exercise. Clinician feedback was positive, but challenges were noted. VPR increased staff time for IT support and individualised exercise prescription proved difficult. The cohort model used may increase wait times but could allow for pathology specific groups.

**Abstract P81 Figure 1 Virtual Pulmonary Rehabilitation Outcomes**

Outcome Measure	Mean change (range)	% meeting MCID (number)	% meeting MCID in PR Clinical Audit 2019
<b>1-minute Sit to Stand (1STS)</b>	2 (-10 – 9)	56% (10)	59.8% <sup>1</sup>
<b>CRQ-</b>	0.65 (-0.8 – 3)	56% (10)	58.6%
<b>Dyspnoea</b>			
<b>CRQ-</b>	0.75 (-1.29 -3.6)	56% (10)	53.7%
<b>Emotional Function</b>			
<b>CRQ-</b>	0.75 (-1.50–3.25)	61% (11)	59.0%
<b>Fatigue</b>			
<b>CRQ-</b>	0.51 (-2.25–3)	44% (8)	58.2%
<b>Mastery</b>			
<b>CAT</b>	0 (-6 -8)	28% (5)	58%
<b>LINQ</b>	-3 (-8 -2)	83% (15)	*
<b>HADS (Anxiety)</b>	1 (-3 -7)	11% (2)	*
<b>HADS (Depression)</b>	0 (-4 – 8)	28% (5)	*

<sup>1</sup> as per the minimal clinically important difference (MCID) for incremental shuttle walk test (ISWT)/6-minute walk test (6MWT) \*No audit data available. CRQ-Chronic Respiratory Disease Questionnaire, CAT- COPD Assessment Test, LINQ-Lung Information needs questionnaire, HADS-Hospital Anxiety and Depression scale.

**Conclusion** VPR was feasible and acceptable during the closure of face-to-face PR. The future role of VPR warrants further investigation- particularly around remote assessment, who can access VPR and exercise prescription.