Spoken sessions

Abstract S21 Figure 1 Daily steps using accelerometry (Actigraph GTX3), at baseline (hospital discharge), 3 months and 6 months for lung transplant recipients assigned to the intervention group (n=5)

(by 7 ± 11 mins) activities, as well as a reduction in sedentary time (by -58 ± 141 mins) at 3 months. At 6 months (n=3), there was a further improvement in daily steps (by 1641 ± 661), a reduction in sedentary time (by -28 ± 137 mins) and time spent in light activities (by -21 ± 36 mins), with an increase in moderate activity time (by 25 ± 29 mins). Following the 3-month intervention, increases were shown in physical functioning, role physical, mental health, bodily pain, and general health SF-36 domain scores, but not in HADs.

Conclusion Tele-coaching appears feasible in lung transplant recipients, with patients wearing the pedometer and interacting well with the app over 3 months. This is promising in the current climate, with the need to develop and evaluate innovative ways of supporting patients remotely.

S22

EVALUATION OF A VIRTUAL PULMONARY REHABILITATION PROGRAMME AND COMPARISON TO TRADITIONAL FACE-TO-FACE PROGRAMMES IN COPD

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Introduction and Objectives During the coronavirus disease (COVID-19) pandemic, pulmonary rehabilitation (PR) services in the UK ceased traditional face-to-face (F2F) programmes and transitioned to remote or virtual delivery. Virtual programmes may continue to be offered as an alternative to F2F programmes in order to increase accessibility to PR. Our objective was to compare the benefits of Virtual Pulmonary Rehabilitation (VPR) to F2F programmes in a community PR service in England.

Methods With the support of the local Digital Health team, VPR was delivered in cohort groups using Microsoft Teams, twice-weekly for 6 weeks, supported by a specialist physiotherapist and with education delivered live or via pre-recorded webinars. The F2F cohort programme comprised of twice-weekly exercise and education sessions for 6 weeks. Outcomes of VPR delivery (June 2020-March 2021) were compared to F2F programmes from the same time period 12 months previously using the following measures: Chronic Respiratory Questionnaire (CRQ); Hospital Anxiety and Depression Scale (HADS). Due to restrictions, physical capacity for VPR was

Abstract S22 Table 1 Number of patients achieving minimal clinically important differences in CRQ and HADS following Virtual Pulmonary Rehabilitation (VPR) or Face-to-Face pulmonary rehabilitation (F2F)

Outcomes	VPR n (%)	F2F n (%)	p value (Chi-square test)
CRQ-Dyspnoea	32 (54)	30 (55)	0.974
CRQ-Fatigue	30 (50)	34 (62)	0.203
CRQ-Emotion	23 (38)	29 (53)	0.121
CRQ-Mastery	24 (40)	34 (62)	0.019
HADS-Anxiety	17 (33)	24 (44)	0.214
HADS-Depression	12 (23)	27 (50)	0.004

measured using sit to stand (STS) tests as opposed to Incremental (ISWT) and Endurance Shuttle Walk Tests (ESWT) for F2F.

Results VPR (n=60) produced significantly smaller improvements than F2F (n=55) in CRQ-Fatigue ($+0.4 \pm 1$ vs $+0.9 \pm 1.3$, $p=0.036$), CRQ-Mastery ($+0.3 \pm 1$ vs $+0.9 \pm 1.2$, $p=0.005$) and HADS-Depression (-0.1 ± 2.7 vs -1.9 ± 3.1 , $p=0.003$). Improvements in CRQ-Dyspnoea ($+0.6 \pm 1$ vs $+1 \pm 1.4$, $p=0.159$), CRQ-Emotion ($+0.3 \pm 1$ vs $+0.5 \pm 1$, $p=0.348$) and HADS-Anxiety (-0.2 ± 3 vs -1.4 ± 3.1 , $p=0.132$) with VPR and F2F were not significantly different. A greater proportion with F2F achieved clinically meaningful improvements in CRQ-Mastery and HADS-Depression but no other statistically significant differences were found (table 1). VPR significantly increased 30-sec STS ($+1.5$ repetitions, $p<0.001$), but not 1-min STS ($+1.7$ repetitions, $p=0.085$). F2F significantly increased ISWT ($+33$ m, $p<0.001$) and ESWT ($+180$ m, $p<0.001$).

Conclusions F2F PR provided larger improvements in outcomes and a greater number of COPD patients achieving meaningful improvements in mastery and depression. However, the number of patients achieving clinically meaningful improvements in dyspnoea, fatigue, emotional function and anxiety with VPR demonstrates the success of transitioning to this model during the pandemic and supports the potential use of such alternative delivery models to increase access to PR.

S23

INTEGRATING HOME-BASED EXERCISE TRAINING WITHIN A HOSPITAL AT HOME SERVICE FOR PATIENTS HOSPITALISED WITH ACUTE EXACERBATIONS OF COPD: A MIXED METHODS FEASIBILITY STUDY

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Background The uptake of face-to-face supervised outpatient-based pulmonary rehabilitation (PR) following hospitalisation for an acute exacerbation of COPD (AECOPD) is low. One commonly cited barrier is travel. Home-based PR may be an alternative setting. The aim of this study was to determine whether a co-designed home-based exercise training intervention, delivered alongside usual hospital at home (HaH) care