Abstract Presentations

2. Cathy Gillen, Ireland

Breathing and feeling well through universal access to right care
Home based Virtual Pulmonary Rehabilitation Programme for COPD Patients

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Pulmonary Rehabilitation

- Key management strategy in the treatment of Chronic Respiratory Disease (BTS 2014)
- Reduces hospital admission rates (Griffiths et al 2013)
- Conventional PRP consists of exercise and education with twice weekly classes at a centre for a minimum of 6 weeks (BTS Guidelines 2013)
- Frequent travel to a centre based programme is often reported as a barrier to attendance (Keating et al 2011)
- Advances in technology have allowed therapeutic interventions to be delivered straight to the patient’s home. (Cox et al 2018)
- Remote delivery of PR improves equity of access and prevents service interruption during Covid
• mPower
• Uptake and Adherence
• Transport / Parking / Respiratory Regime
• eHealth
• Carbon Footprint
• Self-efficacy
• Covid19
Alternative PR Models

- Safe
- Feasible
- Comparable Clinical Improvements
- Patient Acceptability
Project Aim

- Provision of a 7 week home-based virtual pulmonary rehabilitation programme for patients with COPD under the guidance of a physiotherapist, utilising video conferencing equipment in the primary care setting with the patients own IT devices.
RESULTS
Exercise Capacity

Differences in ISWT in metres

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<th>Pt 1</th>
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Pre — Post
RESULTS

Quality of Life

Difference in CAT Score (MCID >2)

PATIENT 1 | Pre 31  Post 23
PATIENT 2 | Pre 23  Post 13
PATIENT 3 | Pre 18  Post 9
PATIENT 4 | Pre 19  Post 15
PATIENT 5 | Pre 15  Post 8
Savings

- 1918 KM
- 42 Hours Travel Time
- Fuel & Parking
- Carbon emissions
- 50% less staff
Patient Satisfaction

Anonymous Patient Satisfaction Survey

- Will continue
- Recommend to others
- Enjoyed exercising at home
- Technology easy to use
- Easily follow class
- Satisfied with Progress
- More confident
- Program Met Expectations

0% 20% 40% 60% 80% 100%

- Strongly Agree
- Agree
- Neutral
"because I didn't have to leave home I probably put more into it because I didn't have the pressure or stress of getting to the hospital" Stephanie

"it's easy to set up the computer and then you can do the exercises anytime you want" James

"you can go straight from bed to the class, I didn't even have to go down the stairs" Nuala

"I much preferred the home programme for the simple reason its just more relaxed because when you get up in the morning you don't have this feeling of having to rush to the hospital and then look for a parking space..." Marion
1 Min Sit - Stand

Platform Salaso

abc questionnaire

GAD -7 & PHQ-9

Covid
RESULTS

- 8 PARTICIPANTS
- 100% COMPLETION
- 100% IMPROVED EXERCISE CAPACITY
- 83% IMPROVED COPD HEALTH STATUS
- 71% IMPROVED QUALITY OF LIFE SCORE
- 75% REPORTED PREFERENCE TO EXERCISE AT HOME
What Next?

- National Clinical Programme
- Research
- IPF
- Tech instructional videos
- Provision of devices

References

- BTS Guidelines on Pulmonary Rehabilitation in Adults. *Thorax* 2013: 68
- Burkow, TM. et al. (2015) ‘Comprehensive pulmonary rehabilitation in home-based online groups; a mixed method pilot study in COPD’ *BMC Res Notes* 2015; 8:766
- Cox, NS. Et al. (2018) ‘Telerehabilitation versus traditional centre-based pulmonary rehabilitation for people with chronic respiratory disease; protocol for a randomised controlled trial’ *BMC Pulmonary Medicine* 2018; 71
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Virtual Pulmonary Rehabilitation             Sláintecare in Action
Thank you for listening

Questions?