Abstract Presentations

2. Cathy Gillen, Ireland

Home based Virtual Pulmonary Rehabilitation Programme for COPD Patients

Our Lady of Lourdes Hospital Drogheda, Ireland

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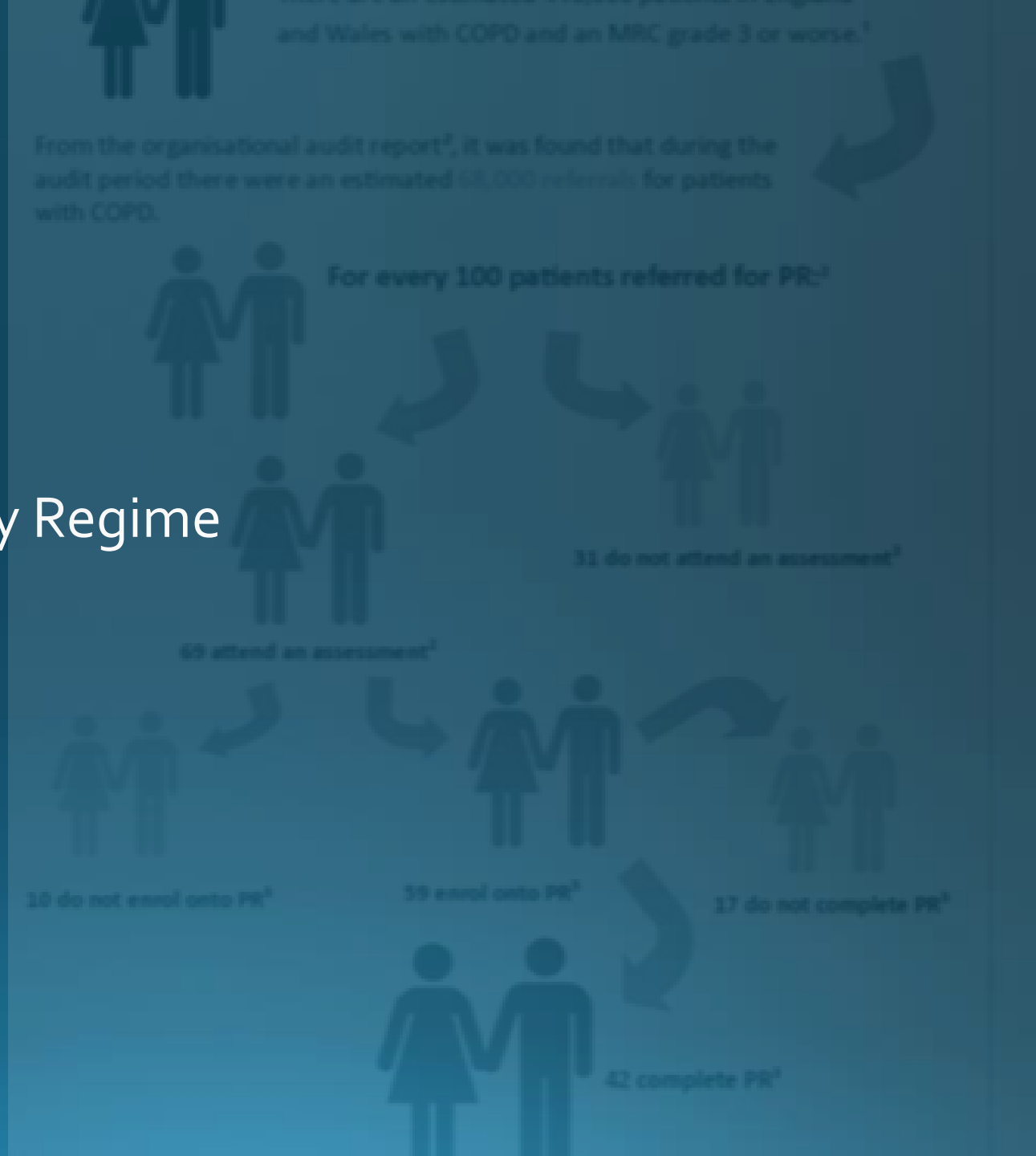
Pulmonary Rehabilitation

- 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

Safety, feasibility, and effectiveness of virtual pulmonary rehabilitation in the real world

Liam Knox,[1] Michelle Dunning,[1] Carol-Anne Davies,[1] Rebekah Mills-Bennet,[1] Trystan Wyn Sion,[1] Kerrie Phipps,[1] Vicky Stevenson,[1] Claire Hurlin,[1] and Keir Lewis[1,2]

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Abstract

Purpose

To assess the feasibility, safety, and effectiveness of a VIrtual PulmonAry Rehabilitation (VIPAR) program in a real-world setting.

BMJ Open Interactive web-based pulmonary rehabilitation programme: a randomised controlled feasibility trial

Comparison of a structured home-based rehabilitation programme with conventional supervised pulmonary rehabilitation: a randomised non-inferiority trial

Elizabeth J Horton,[1] Katy E Mitchell,[2] Vicki Johnson-Warrington,[2] Lindsay D Apps,[2] Louise Sewell,[2] Mike Morgan,[2] Rod S Taylor,[3] Sally J Singh[2,4]

Internet-enabled pulmonary rehabilitation and diabetes education in group settings at home: a preliminary study of patient acceptability

Tatiana M Burkow,[1] Lars K Vognild,[2] Geir Østengen,[3] Elin Johnsen,[1] Marijke Jongsma Risberg,[4] Astrid Bratvold,[1] Tord Hagen,[5] Morten Brattvoll,[6] Trine Krogstad,[7] and Aushild Hjalmarsen[4]

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Abstract

Background

The prevalence of major chronic illnesses, such as chronic obstructive pulmonary disease (COPD) and diabetes, is increasing. Pulmonary rehabilitation and diabetes self-management education are important in the management of COPD and diabetes respectively. However, not everyone can participate in the programmes offered at a hospital or other central locations, for reasons such as travel and transport. Internet-enabled home-based programmes have the potential to overcome these barriers.

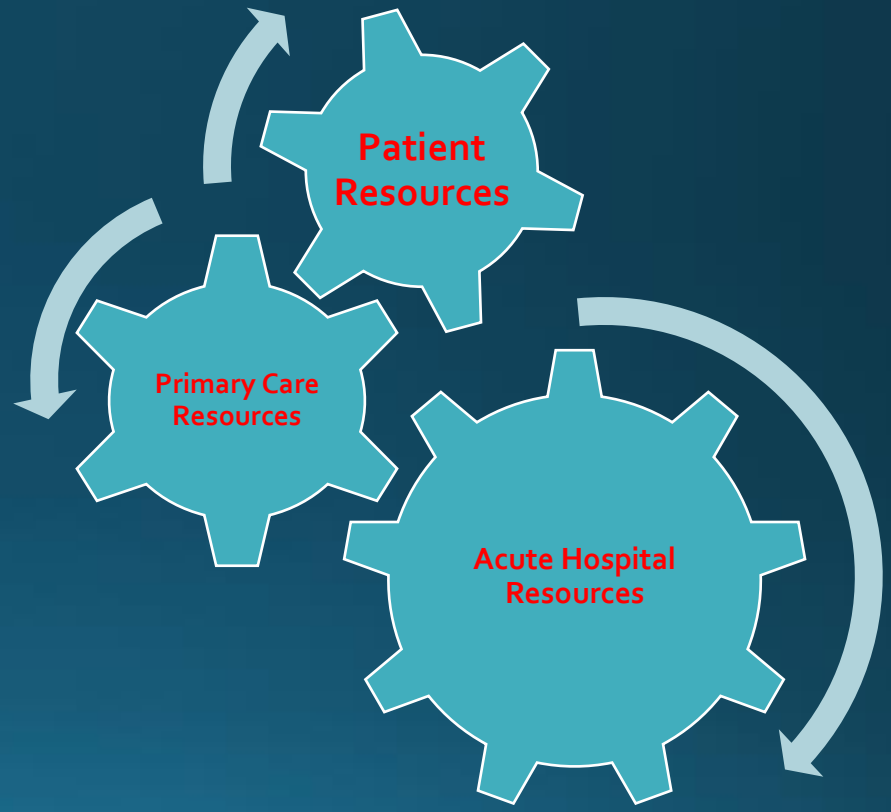
This study aims to assess patient acceptability of the delivery form and components of Internet-enabled programmes based on home groups for comprehensive pulmonary rehabilitation and for diabetes self-management education.

Methods

We have developed Internet-enabled home programmes for comprehensive pulmonary rehabilitation and for diabetes self-management education that include group education, group exercising (COPD only), individual consultations, educational videos and a digital health diary. Our prototype technology platform

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

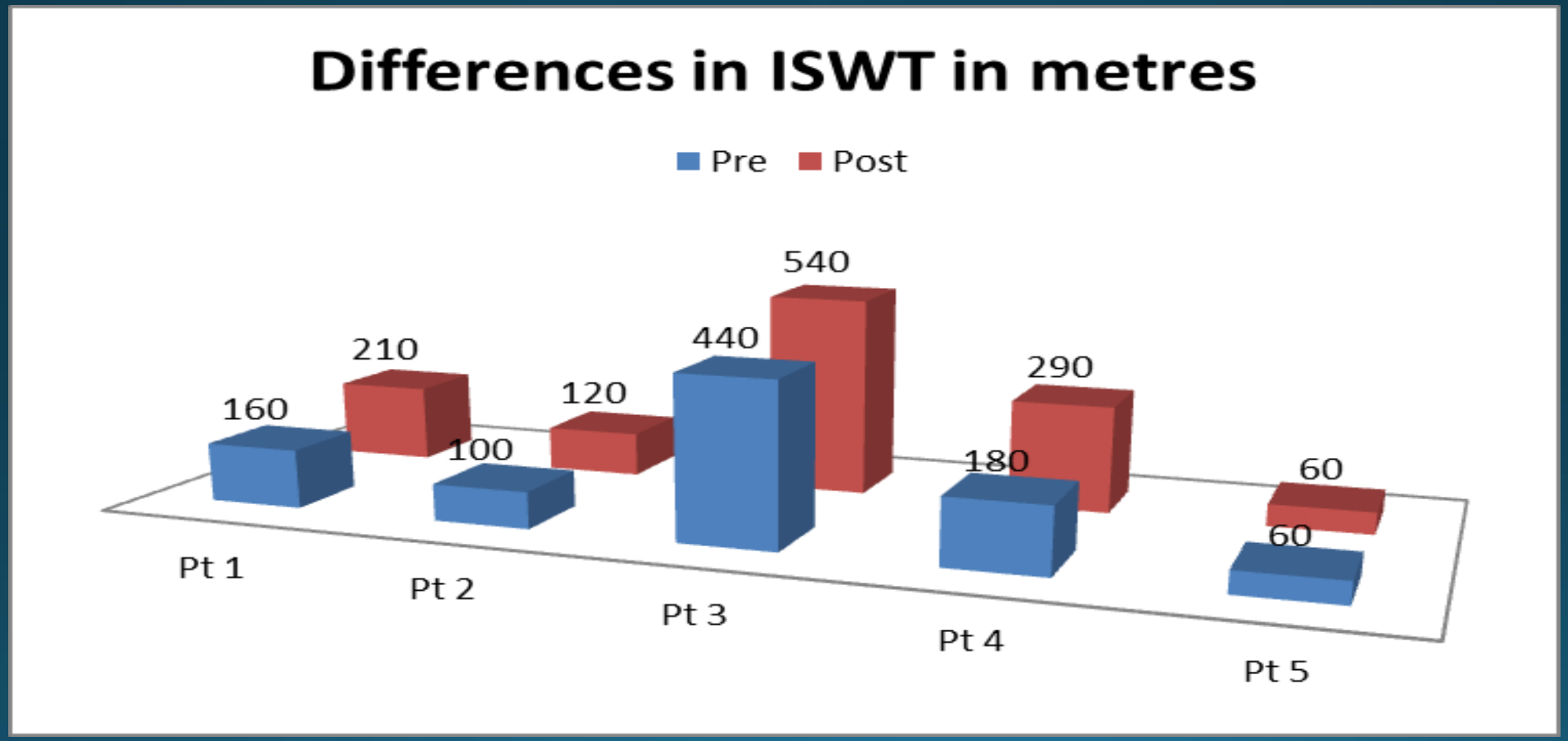



Information, data and content
Teaching, learning and self-development
Communication, collaboration and participation
Digital identity, wellbeing, safety and security
Technical proficiency
Creation, innovation and research
Person-centred
DIGITAL LITERACY


Platform
Attend Anywhere
IT Device
Assessment & Outcome Measures
Virtual Pulmonary Rehabilitation
Email & WiFi
Spo2 & Hand Weights
Safe Space

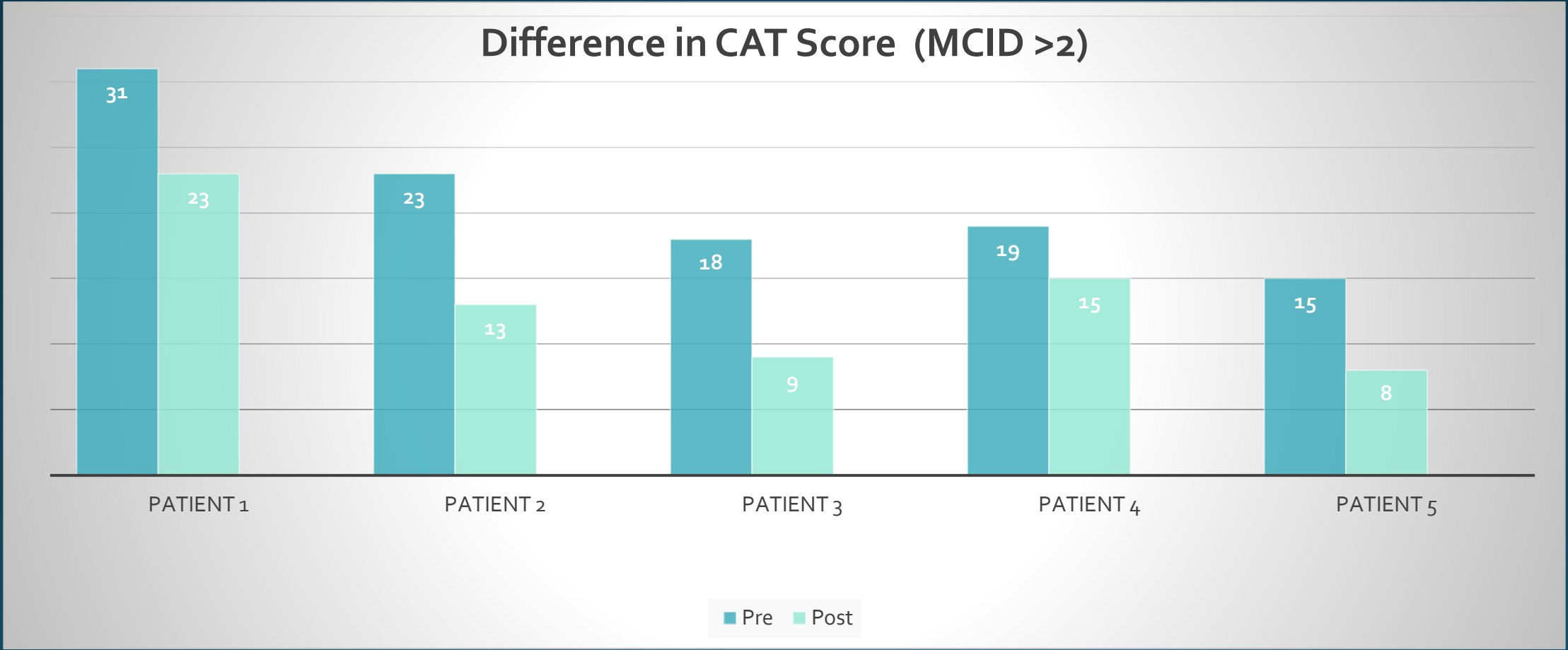
RESULTS

Exercise Capacity



RESULTS

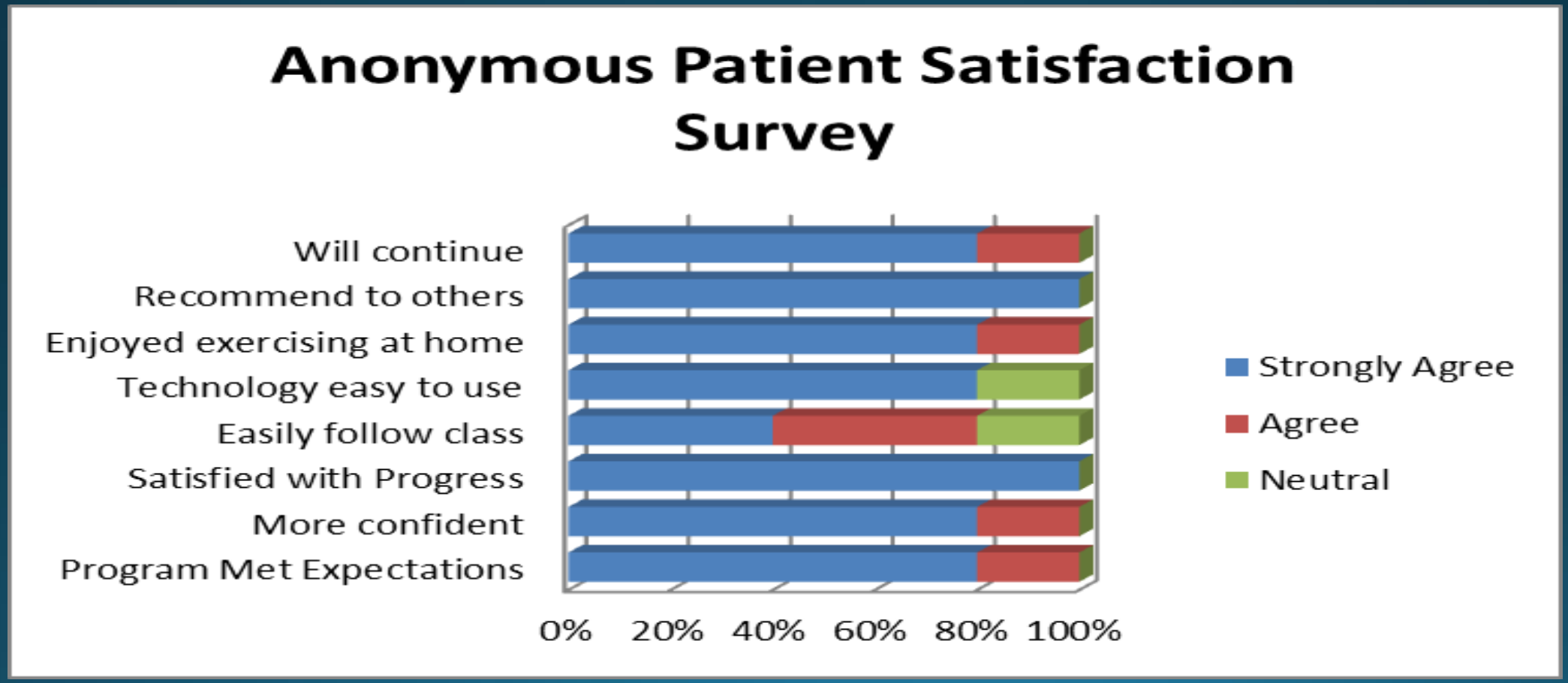
Quality of Life



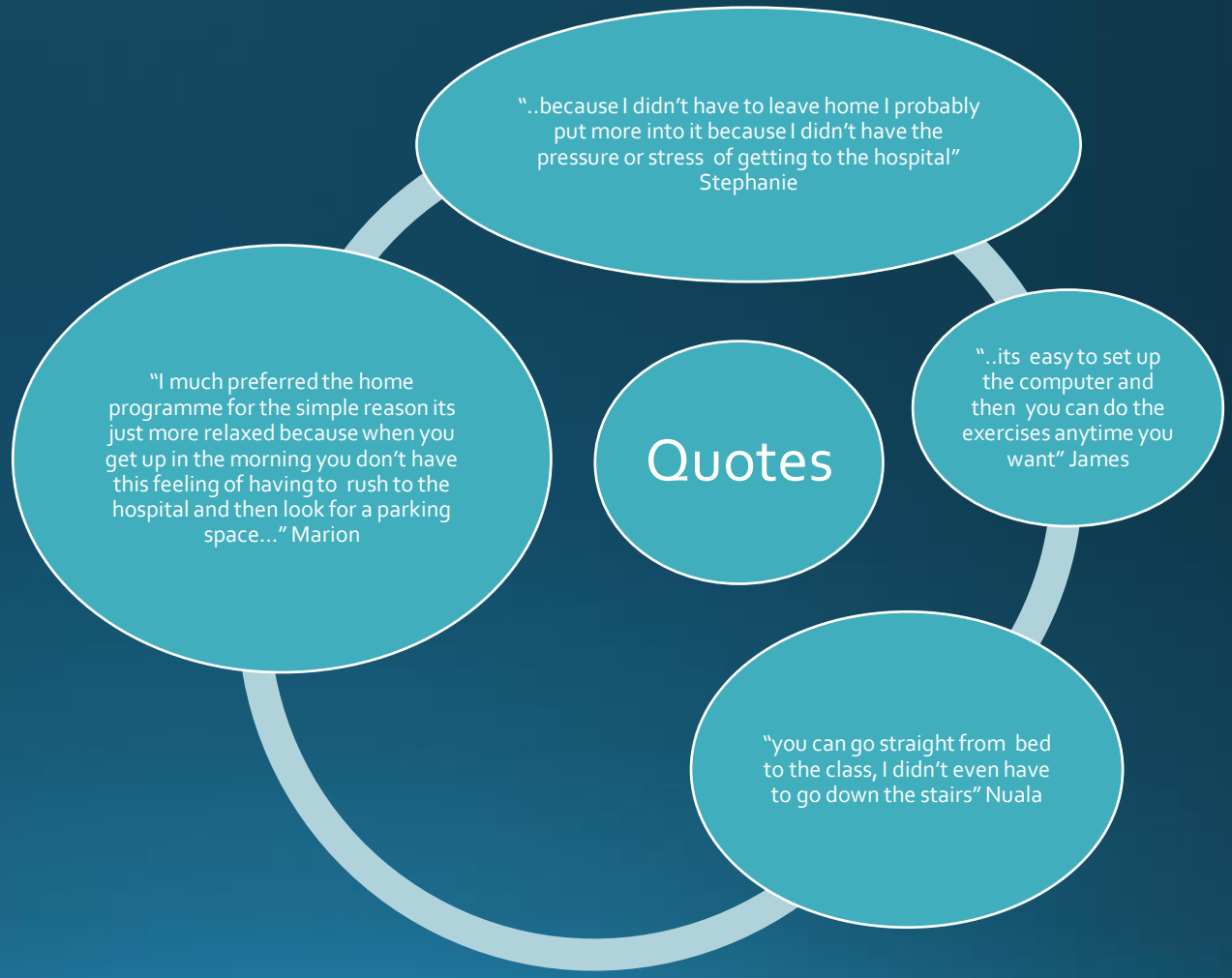
Savings

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

Patient Satisfaction



Patient Feedback



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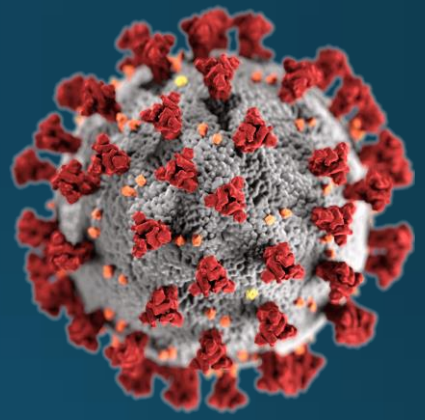
1 Min Sit - Stand

abc questionnaire

Covid

Platform Salaso

GAD -7 & PHQ-9



RESULTS

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

What Next?

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

https://www.hse.ie/eng/about/who/cspd/ncps/copd/resources/ncp-respiratory-guidance-on-setting-up-virtual-pulmonary-rehabilitation-for-asthma-and-copd.pdf

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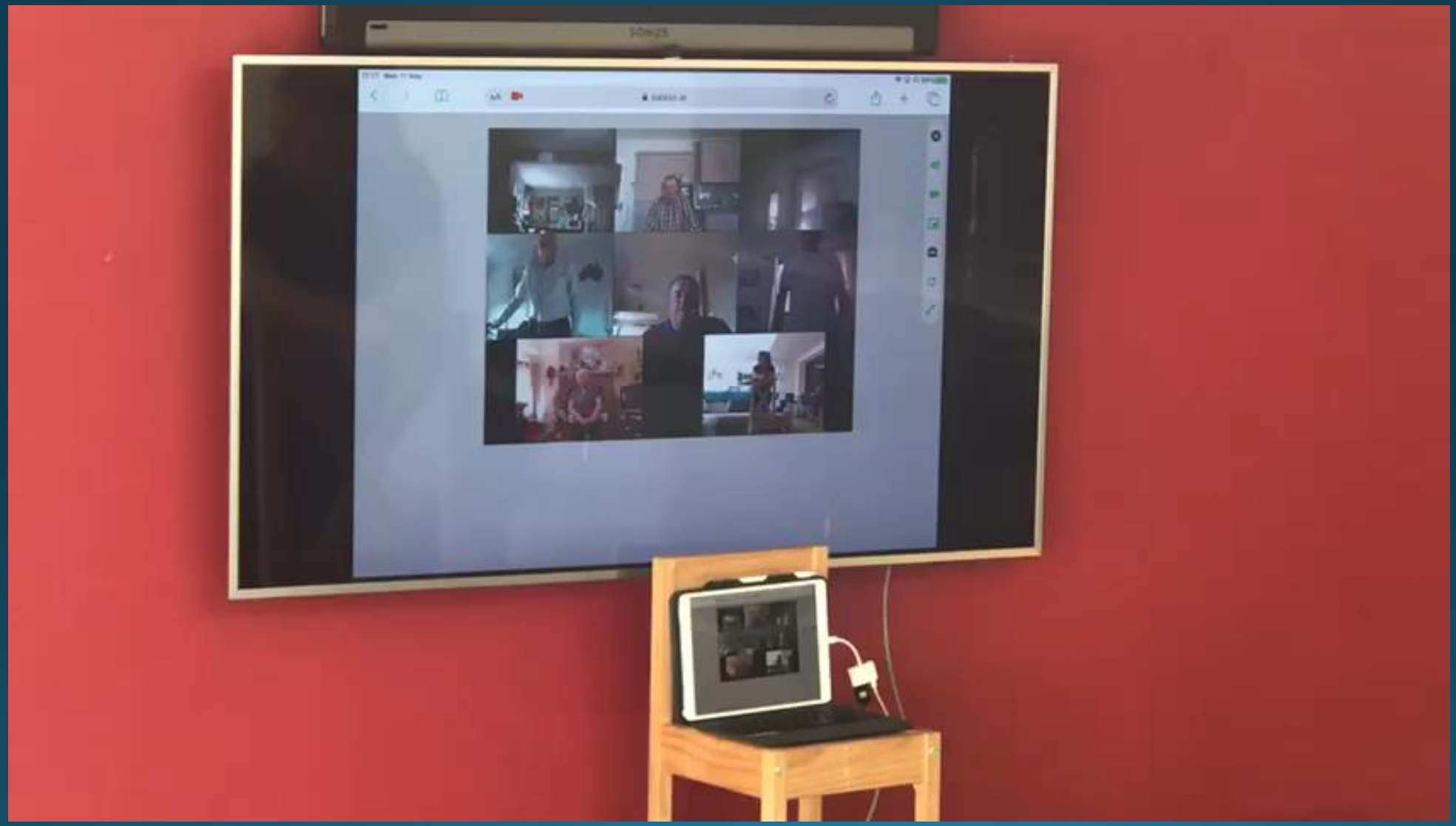
Respiratory Group



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Virtual Pulmonary Rehabilitation

Sláintecare in Action

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Thank you for listening

Questions?