



Virtual reality increases mobility in COPD patients

A national shortage of physiotherapists means places are limited on pulmonary rehabilitation classes in outpatient departments resulting in patients are having to wait longer.

As part of Better Care Together, a study took place in June 2018 to test the effectiveness of **virtual reality** as a form of remotely supervised home-based pulmonary rehabilitation. The two focus groups and six one-to-one interviews were conducted in Cumbria with nine patients aged 70+ who have **Chronic Obstructive Pulmonary Disease (COPD)**.

COPD has a significant impact on patients' quality of life. One of the causes of **COPD** is dyspnea or shortness of breath. This can have a number of affects including reducing the patient's ability to exercise and their mood.

Traditionally one physiotherapist would deliver pulmonary rehabilitation (PR) to around 50 patients but pulmonary rehabilitation in virtual reality can help to deliver PR to more than 300 people, whilst freeing up capacity for staff to have a dedicated chest physiotherapy and dysfunctional breathing clinic.

The study saw patients using a virtual reality headset in their homes for periods of 30 minutes every day, for five to seven days a week, for six weeks, with supervision from a healthcare professional.

"The study has been a success and has shown many patient benefits. The team leading the work is now looking to to deliver pulmonary rehab as a part of technology enabled care."

Dr Amin, Burnett Edgar Medical Centre



Patients saw the following improvements:

- An increase in strength, more flexibility and less pain
- A positive impact on patient's mobility, confidence and control to conduct daily activities in their home
- Increased confidence, quality of life and better self-management of their condition.

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