



Cubii Seated Exercise Project Increasing exercise on the inpatient units



Ami Cook & Debbie Poulston Physiotherapists BaNES Community Hospitals





Background

- Inpatient rehabilitation units based in Bath & North East Somerset
- Patients spend a long time being sedentary in hospital, sat in chairs or led in bed for long periods.

Aims of the project:

- Increase the amount of physical activity on the inpatient units
- Engage more patients in strength training
- Prevent hospital acquired deconditioning



Deconditioning in hospitalised older people can cause serious harm



Up to 60% of older patients experience functional decline after hospitalisation (Hoogerdjun et al 2012)





Evidence



International exercise recommendations in older adults (2021) – exercise and resistance training are especially important to minimise deconditioning and should be **performed daily** if their medical condition allows until discharge

Kempel *et al.,* (2021) looked at the effect of chair-based exercise on physical function in older adults – **safe and progressive way to exercise**, ideal for those who are particularly frail or deconditioned

"Health services should be reinforcing the message that every minute of physical activity counts." – Kempel et al., (2021)







Why Cubii?

Substantial (Not flimsy)

Cost-Effective

Portable

Low impact

Accessible for the majority

No electric supply required





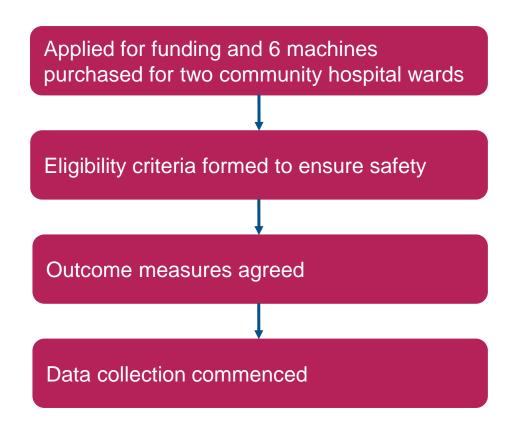






Description



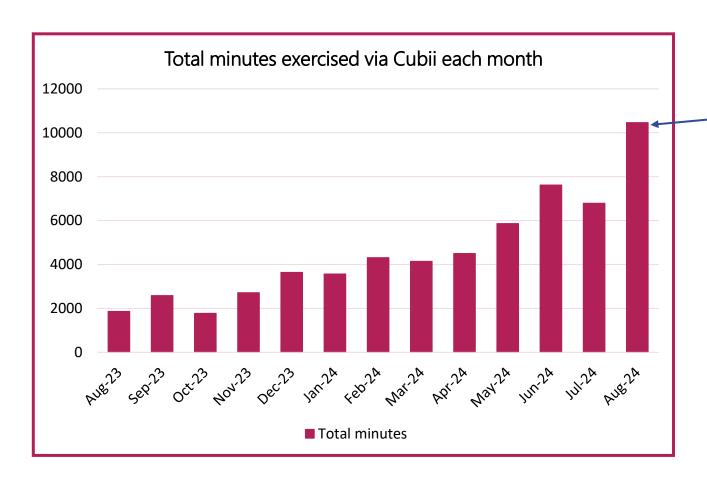




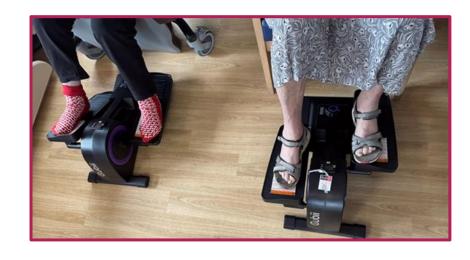




Impact



August 2024
10461 minutes of exercise across 49 different patients



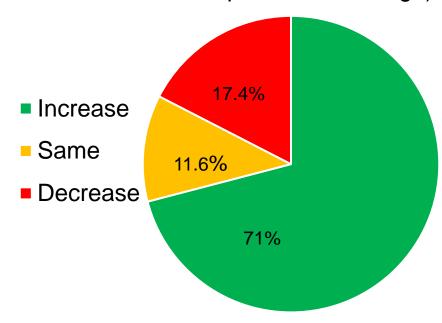




Results – 5-minute test

5-minute tests: 86 tests completed on both admission and discharge

Difference in 5 minute test scores (Admission compared to discharge)

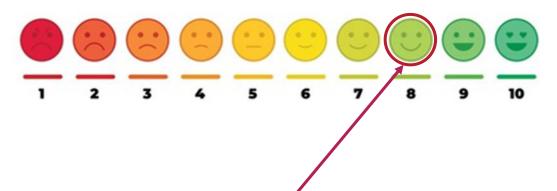






Patient Feedback – Part 1

Question 1: On a scale of 1 to 10, how much did you enjoy using the seated exercise machine during your time on the rehabilitation unit?



79 questionnaires completed in first 3 months Average score 8 out of 10 I really enjoyed it. Very good for your legs. It feels as if you're doing something worthwhile.

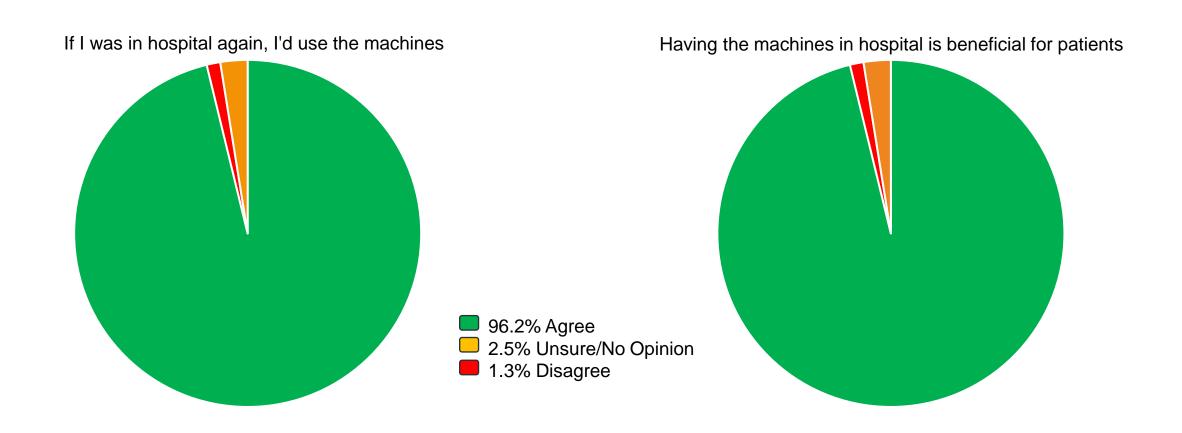
I'm going to get myself one, its bloody good exercise, made me realise my thighs and knees have got weak and I could selfregulate how hard I worked.

Found it relaxing and the pressures on pedals was just right for me, it wasn't too hard.





Patient Feedback – Part 2







Staff Feedback

Able to provide physical activity to multiple patients at the same time, engaging more patients in physical activity despite the staffing levels!

They are a clever way of increasing patient therapy time, with a good focus on muscular strength and improving deconditioning.



Quick and easy to use. It allows for extra therapy and exercise for patients. The machines can be used by therapy staff and nursing staff which is a huge benefit.

It is a fun way of keeping a wide variety of patients moving, it is good to see the competitiveness from some patients, socialising together and trying to beat their last go!





Our learning

Achieved our 3 aims

Simple chair-based exercise

Progressive resistance exercise

Multiple patients involved



Engaging

Cost-effective

Reducing deconditioning

Efficient





Next steps

Training nursing colleagues (ongoing)

Promoting exercise following discharge

Sharing the results wider

Contacted Cubii CEO to share learning

Continue using them with our patients







Contact Details:

Ami.Cook@hcrgcaregroup.com Debbie.Poulston@hcrgcaregroup.com





Cubii Seated Exercise Project

Increasing the amount of strengthening exercise on Paulton & Bath Community Hospital Wards



Background:

Patients spend long periods of their hospital stay being sedentary and deconditioning. Any functional decline can impact on levels of independence and ultimately discharge destination.

We aimed to find a cost-effective, efficient solution that didn't require additional staffing or space and was accessible for most patients, including the frailest.

Impact:

- 143 patients used the Cubiis during the first 3
- Record month in June 2024, 55 different patients collectively pedalled over 127 hours

Total minutes exercised via Cubii each month 8000 7000 6000 5000 AUR'D SELIS OFIS PURIS DELIS PRINT ERIS PRINT ERISTA PRINT PRINT PRINT

■ Total minutes 5-minute test results:

- Patients initially cycled for 5 minutes on level 1 and repeated the same test before discharge, the distance was recorded and compared.
- 86 tests were completed within 3 months.

Difference in 5 minute test scores (Admission compared to discharge)



Description:

- Applied for a grant to fund six machines for two community hospital wards
- Eligibility criteria formed to ensure safety
- Outcome measures agreed Training of staff
- Data collection

Patient feedback:

79 questionnaires were completed within first 3 months

- 96.2% of patients agreed they'd use the machines again if they were in hospital
- **96.2%** of patients agreed the machines are beneficial for patients

"I am **proud** I was able to do it, it helps keep you going."

"It's **enjoyable** and beneficial, I really enjoyed watching the minutes tick by."

Staff feedback:

"It allows for patients to engage in more exercise and therapy."

'Quick, easy and can be used **7 days** a week by therapy and nursing staff."

Our learning:

- A simple, progressive chair-based strengthening exercise that many patients are keen to engage with
- Identified a way to reduce sedentary behaviours, helping to prevent deconditioning without increasing therapy staffing

Next steps:

- Shared results within the organisation and nationally to allow them to apply our learning to multiple
- Contacted Cubii CEO to share learning, trial new Cubiis and received discount code
- Cubiis used daily within the community hospitals
- Promote continuing exercise following discharge

Email: Ami.Cook@hcrqcaregroup.com and Debbie.Poulston@hcrgcaregroup.com







