Digital Pathways for the Management of Cardio-respiratory Conditions and Covid-19

www.leicspart.nhs.uk

Long term conditions management and Covid virtual wards

Community-based remote monitoring pathway for patients with chronic conditions and Covid 19 using digital technology

Approach

- Rapidly responded to the needs of 'the system'
- New and innovative way of providing care
- Personalised patient support
- Patients cared for safely in their own homes

Safety

- New pathways of care were provided quickly and safely
- Robust and rapid clinical governance across organisations
- Clear reduction in readmissions (C19)

Need

- Protect clinically vulnerable by reducing clinics and home visits
- Reduce unplanned hospital admissions
- Support patients with Covid 19 on discharge in the community
- Alternative rehabilitation delivery methods required

I feel more able to manage my condition as I've learnt what's normal for me as I have recorded my data.

Patient feedback

WeAreLPT
compassion respect
integrity trust

1 **Phase 1** - Heart failure and COPD patients (first established spring 2020)

↓

2 **Phase 2** - Digital rehabilitation for heart failure and COPD patients (summer 2020)

↓

3 **Phase 3** - COVID-19 virtual wards for supporting hospital discharges or 'step down' (autumn 2020)

↓

4 **Phase 4** – Virtual ward for supported hospital discharges extended to include patients on weaning doses of oxygen. (January 2021)

How it works for our patients

Set up

Patients are given **personalised support to set up and use the technologies,** including a patient user guide, a demo session as part of their hospital discharge, telephone and video calls and even socially-distanced, face-to-face training at home if more help is needed.

Monitor

A management plan is discussed and agreed with the patient and they submit answers to **a set of questions and take vital measurements relating to their condition.** They upload this data which feeds through in real-time to the platform's central dashboard.

Alert

Parameters for individual patients based on their baseline data informs an algorithm in the system which **automatically flags patients who may be at risk or who are deteriorating using a red, amber, green health status.**

Intervene

A **multidisciplinary team,** made up of clinicians, nurses and physiotherapists, then work together to diagnose and treat the problem and prevent an unplanned hospital admission wherever possible.

Impact

216

COVID-19 patients have been discharged with remote monitoring at home after a hospital admission with only ten people being readmitted to hospital during their 14-day monitoring period

28

Oxygen weaning patients have accessed the COVID-19 virtual ward

1000

Patients have been supported across the four digital pathways

700+

Patients optimised and supported via the COPD or heart failure pathways

50+

Patients with heart failure and respiratory conditions have been supported so far through the digital rehab pathway
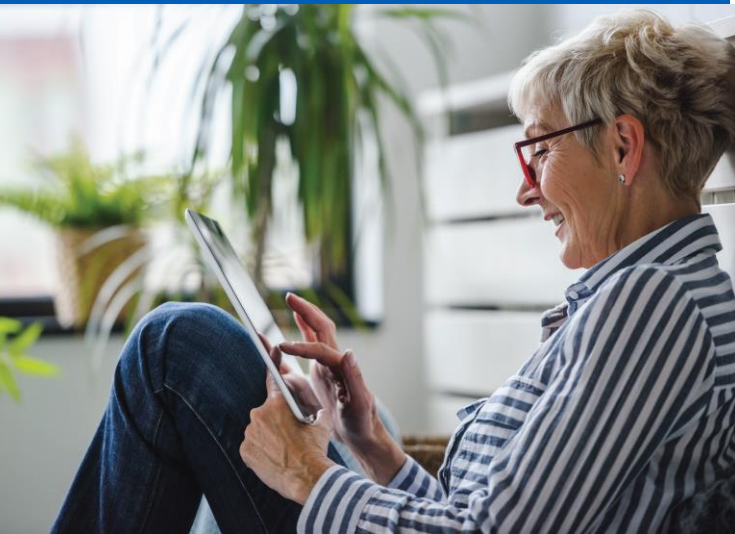
Data Outcomes

- 216 patients referred
- 28 for oxygen weaning

- Currently 8 active patients
- 10 hospital readmissions
- 1 death (in hospital)

Readmission rate: **4.6%**
Average GH C19 wards: **9%**

- 188 patients discharged after 14-days
- 20 patients discharged before 14-days

Reduction in readmission rate by 50%

WeAreLPT
compassion respect
integrity trust

What our patients said…

> *"The patient feels well and thanked me for all the support received over the last 2 weeks which has reduced his anxiety around his illness. He feels the service he has received has been excellent"*

Feedback from C19 virtual ward patient discharge phone call

95% *of patients felt fully support via the digital rehab program*
88% *of patients found it very easy to follow and complete the digital rehab program*

Feedback from digital rehab patient satisfaction questionnaire

> *Thanks for getting me well. I came in needing a lot of oxygen. With the care, dedication and support of the team I was able to leave 8 days later, and have continued to improve. Thank you for setting up the "remote monitoring app". It gives confidence you are still being monitored*

Written patient feedback

WeAreLPT
compassion respect
integrity trust

Embedding digital pathways and the future

- Continuing work with NHSX on national digital agenda

- Contributing to C19 oximetry at home national research study with UCL

- Submitted article on C19 virtual ward to BMJ Innovation journal

- Participating in system wide virtual ward board – how can what we have learnt be shared with other services/ care pathways?

- Involving patients to develop a 'system' commissioned virtual ward for cardiorespiratory conditions and Covid-19

- Enhancing the digital rehabilitation offer to support the system need for additional 'system' Covid-19 rehabilitation

WeAreLPT
compassion respect
integrity trust

Questions

www.leicspart.nhs.uk