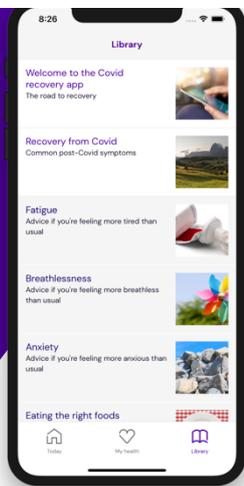


Living With Covid Recovery Programme



Information for NHS Trusts and commissioners

Programme overview

The programme addresses the lingering symptoms of patients who are recovering from Covid-19 following the more acute phase of the illness.

The role of the technology is to increase the number of patients getting high-quality treatment simultaneously and remotely across all aspects of the condition including breathlessness, fatigue, anxiety, coughs, voice changes and nutrition, to enable them to get back to their pre-Covid state of health.

The software and technology element combine bespoke treatment plans for each patient, whilst enabling clinicians to review patient progress and communicate with them remotely. This includes:

- An app for patients providing tailored advice, treatment plans and suggested exercises. The app gives patients guided support using tried and tested techniques for treating the individual symptoms. These symptoms can often be linked and related. Breaking these links down with support of an Allied Health Professional (AHP) can lead to measurable health improvements.
- A dashboard for clinicians (usually AHP or Physio) to review large numbers of patients safely, efficiently, and communicate with them.

So, there are three components:

A care pathway (shown later)

An NHS clinician who supports and monitors the patient through a digital dashboard following an initial assessment

A smartphone/tablet-based app that gives the patient access to information and support as part of their rehabilitation

How can this app and digital platform help me and my service?

This app is useful to help patients self-manage and report their symptoms. It can reduce the caseload for clinicians while allowing them to measure patient progress safely (using the digital platform) and keep in contact with them. In the pilot the average time to assess and remotely monitor a patient was around two to three minutes.

Is there a cost?

No, not usually, but we need access to pseudonymised individual data to support improvement of the programme, and this has to be agreed with your NHS Trust. Some regions of the UK with different funding arrangements may have to pay a support fee for the product.

Are you evaluating the service?

The product has been piloted and results are positive. It is continually evolving and effectively being informed/codesigned by users. Partners using the product will have the opportunity to contribute to an important and rapidly emerging research field and further develop/codesign the technology.

What data do you have so far?

In the first 6 months, 99 patients were onboarded to the app. The mean age was 51 years (range 23 – 84), 53% were male and of those that stated their ethnicity, 66% were White and 34% BAME. Engagement with the App has been high, with >60% using it regularly. Patients undertake a mean average 7.0 actions per week covering recording weight, completing a patient reported outcome measure (PROM) such as FACIT-F, Covid Recovery, GAD-7, MRC Breathlessness, D-12, tracking exercise and/or fatigue diary. Overall, on average each patient has read eleven articles with approximately half of patients creating and tracking goals.

The questionnaire responses entered onto the App feedback to a clinician facing dashboard which is reviewed by the physiotherapist several times per week. Currently, for 102 patients registered, this takes 3-4 hours each week, significantly less time than reviewing this volume of patients in a traditional manner. Any clinical concerns are reported to the medical team. Patients have reported finding the app reassuring and helpful in their recovery.

What about patients who can't access the app?

The App is digital only and only in English. We have found that families and friends can often support with sharing a device to help a loved one or friend.

Can you help with advice on a clinical pathway?

Yes, we can. We have worked with several care pathway models and can share those options with you. The normal route is referral from acute or primary care, assessment by an MDT and senior clinician who then refers appropriately to specialist of community services, or in the majority of cases to the app and remote monitoring by an AHP or similar. (see pathway figure 1)

What training is there for the AHP and patient?

We can provide a guide and virtual mentoring for AHPs to help set up and use the system (normally from a laptop for the clinician) and help them to teach patients how to use the app. The app itself simple and intuitive.

What's the advantage of using digital interventions?

The rationale for a digital approach to supporting patients with Long Covid is:

- Very large numbers of patients, around 60% of those admitted to hospital are symptomatic after 12 weeks

- Symptoms very varied and variable, both between and within patients
- Treatments exist for these symptoms
- Skilled HCP is required, but in short supply, and already full workload
- Services often symptom specific, which is inefficient (4 HCPs supporting 1 patient) and patient burden
- Patients often reluctant to attend hospitals/clinics

Benefits of using the app

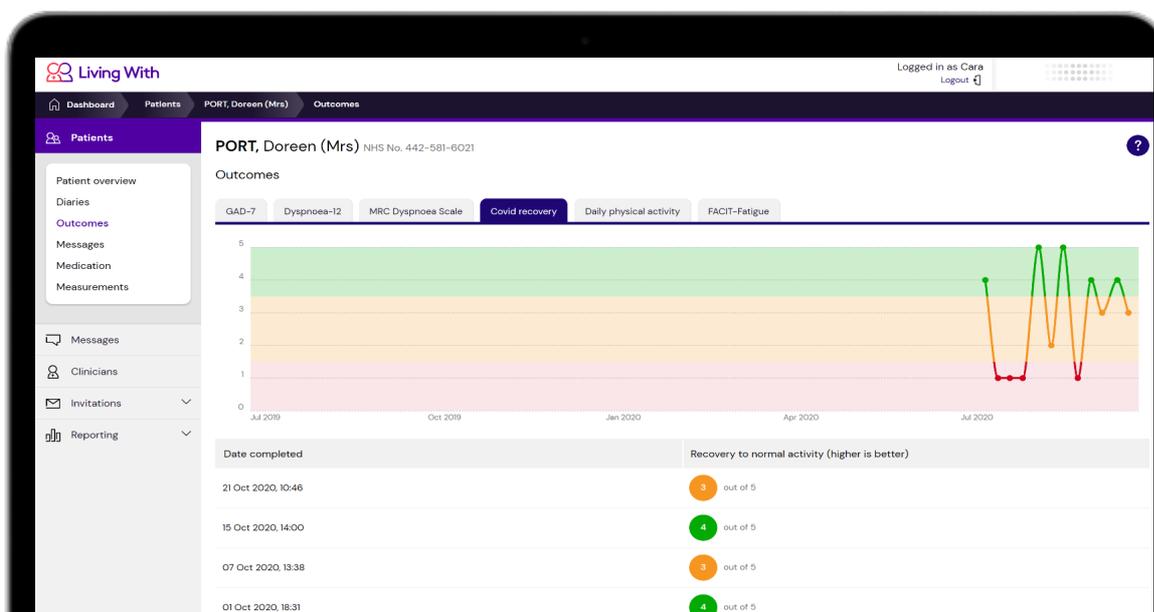
- Increased support for patients across all levels of risk and improvements in patient's symptoms
- It enables clinicians to monitor all aspects of patient's conditions remotely
- You can manage the patient's care more efficiently, providing them quick and easily personalised treatment plans as they follow the pathway
- It can overcome the digital equity divide ensuring that all types of patient can get remote support

Features of the app

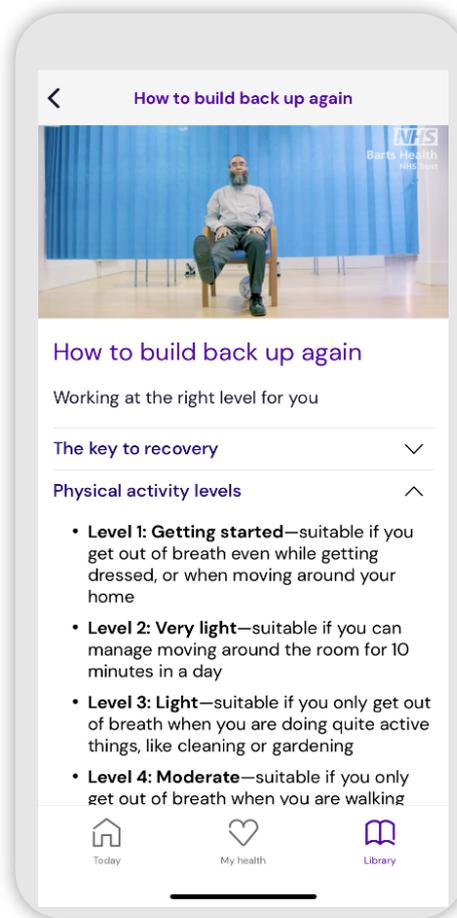
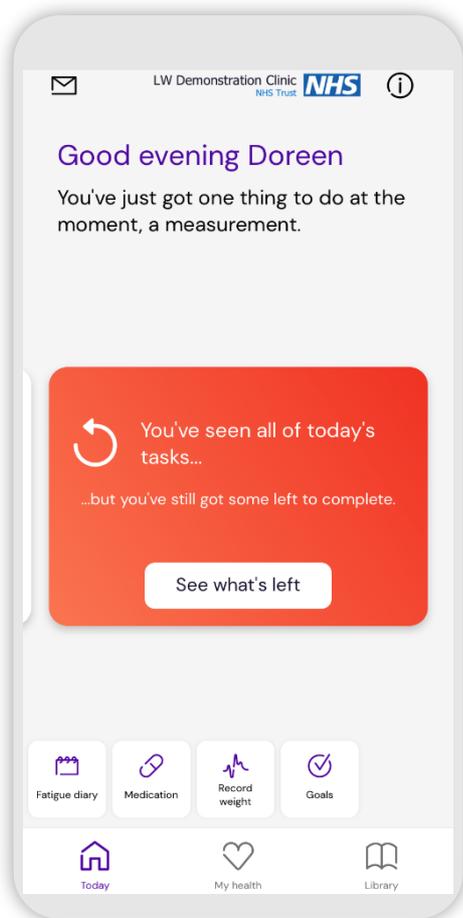
- Patients
 - Can track outcomes and symptoms including fatigue, anxiety, breathlessness, weight, cough, and diet/nutrition.
 - Can set and complete exercise plans
 - Are able to communicate directly with your clinical team
 - Have a comprehensive range of condition information
- Clinicians
 - Are able to filter and triage patients by severity of symptoms
 - Monitor patient outcomes (e.g. FACIT-Fatigue, GAD-7, MRC Breathlessness, D-12, EQ5D, PHQ-8) and symptoms
 - And can efficiently communicate and manage patients including sending and receiving messages

What does it look like?

Clinicians dashboard



Patient's app view



What have people said about the Living With Covid Recovery Programme?

Hannah Hylton is a physiotherapist who tested the App in London:

"The Living With Covid Recovery App is an innovative way of providing digital health care. As clinicians we can monitor outcomes and offer patient education, support and encouragement for the emerging group of patients with long lasting Covid symptoms."

Sophie, a patient using the App as part of her recovery from Long-Covid symptoms:

Clinical Lecturer in eHealth and GP; Dr Fiona Hamilton: Associate Professor in eHealth and GP; Prof Delmiro Fernandez-Reyes: Professor of Biomedical Computing; Prof Fiona Stevenson: Professor of Medical Sociology

Barts

- Dr. William Ricketts, Consultant Thoracic surgeon, Dr Paul Pfeffer: Consultant Respiratory Physician; Dr Richa Singh: Consultant Respiratory Physician, Hannah Hylton, Respiratory physiotherapist; Charlotte Foster: Dietitian at Barts Hospital

UCLH, CNWL AND Royal Free

- Dr Melissa Heightman: Clinical lead of the COVID follow up service at UCLH and integrated Consultant Respiratory Physician at UCLH; Dr Stuart Linke: Clinical psychologist at Camden and Islington Foundation Trust; and Professor John Hurst: Professor of Respiratory Medicine (UCL) and Consultant Respiratory Physician, Royal Free

Other Research Expertise

- Katherine Bradbury: Health Psychologist at Southampton University; Professor William Henley: Professor of Medical Statistics at Exeter University



What happens next?

If you would like to know more and get involved contact:

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