

# HEALTH APPS FOR LONG COVID SELF-MANAGEMENT

ORCHA examines trends in the growth of digital health tools throughout COVID-19, featuring some of the highest-performing apps to support long COVID symptoms.

ORCHA.CO.UK +44 (0) 1925 606542 HELLO@ORCHA.CO.UK





# Health apps for long COVID self-management

Amongst the 3.9 million confirmed COVID-19 cases in the UK to date, it is estimated that around one in five people experience symptoms that last for five weeks or longer, and one in ten have symptoms that last for twelve weeks or longer.

Termed long COVID, people report a myriad of symptoms including chronic fatigue, breathlessness, loss of sense of smell, depression and concentration difficulties. Already totalling an estimated 186,000 people, long COVID will bring mounting pressure on primary care services.

Within COVID-19 rapid guideline: managing the long-term effects of COVID-19, NICE recommends health apps as part of giving advice and information on self-management.

ORCHA has assessed almost 6,500 health apps to date. We check apps against more than 350 measures and all major standards. From this research, we are able to identify the top-scoring apps across each of the long COVID symptoms and so help primary care, community settings and multidisciplinary assessment and rehabilitation services make informed decisions on the best apps for their patients.

## In this report we detail:

- The impact of long COVID in services today.
- The scale of growth in the search and supply of apps to treat long COVID symptoms.
- How, despite a 1087.5% rise in apps for COVID-19 in the first seven months of 2020, there is still no
  app development for the long COVID category.
- The highest-performing apps for the most common long COVID symptoms.



# Long COVID in services today

Across general practice, COVID-19 hot hubs and community services, teams are seeing long COVID patients starting to come through. Some patients are seen earlier, for example by community physio teams, who are treating patients that otherwise would be in hospital or accessing outpatient services. In some GP practices, numbers may seem low, yet it's feared these may be the tip of the iceberg, as many patients continue to stay at home and not seek help. The Royal College of General Practitioners (RCGP) reports that it expects GPs to see an influx of patients with "lingering" illnesses.

Clinics are seeing patients with fatigue, ongoing breathlessness and reduced physical fitness, as well as persistent coughs. It can present similarly to fibromyalgia, which can cause uncertainty. Patients often need a multi-disciplinary team to provide rehabilitation over a number of weeks. Research published by the Chartered Society of Physiotherapy found almost 20% of patients will require rehabilitation for 5-6 months. Alongside these symptoms, a large volume of patients are also presenting with anxiety, depression and stress-related problems.

There is still a lot we don't know about long COVID, and so its full impact is not yet known on patients' long-term health issues or the impact on mental health and respiratory services for years to come. But detailed assessments confirm patients need longer-term care plans and follow up, which to be viable must include self-management.

NICE guidelines recommend directing patients to apps to help in self-management. Anecdotally, healthcare professionals cite the Coronavirus Support App, the NHS 'Your COVID recovery' website and mental health apps as useful. Alongside these sources, there are many more apps that help patients self-manage a range of long COVID symptoms.





# Growth in search and supply of apps

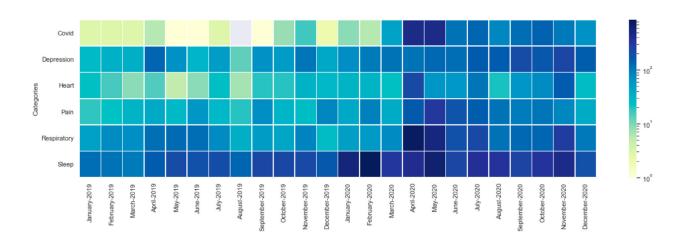
Guidelines recommend the use of digital health to help self-manage long COVID symptoms, and our research indicates that professionals and the population are following this advice.

ORCHA provides support to NHS services in 50% of regions and to national bodies across the world, including Holland, Israel and Finland, serving a population of ~20 million. This reach gives ORCHA unique insights into exactly how the UK, and world, is engaging with digital health.

## The growing demand for apps

We looked at relevant keywords that have been used to search the ORCHA App Library from January 2019 all the way to December 2020. We grouped these searches into topics and produced the following heatmap to explore the changes in searches for the symptoms of long COVID over time. Each square represents searches in a given month for a particular category, and the colours represent the volume of searches using a logarithmic scale.

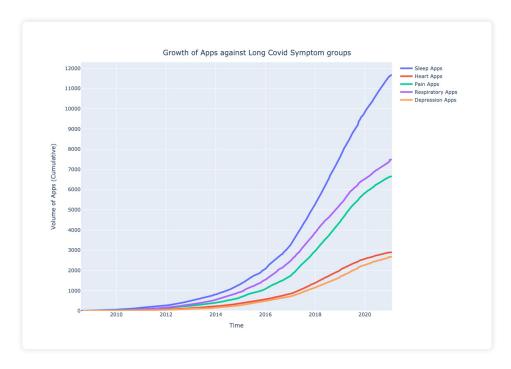
Although there are monthly fluctuations, searches for apps to support depression, heart health, respiratory conditions and sleep showed overall growth throughout 2020.

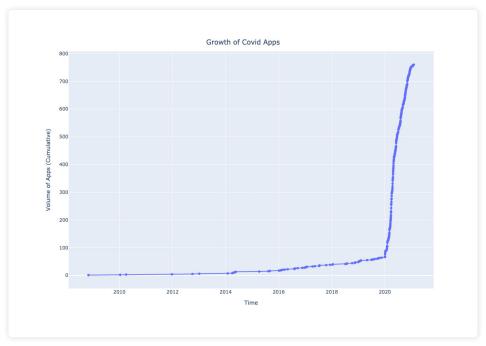




## The growing supply of health apps

The increased demand for health apps has been met by a growing supply of solutions. This started before the arrival of COVID-19, with 2020 continuing to see this growth. There continues to be a growing number of apps to help manage all long COVID symptoms, with now almost 12,000 health apps to choose from to help manage sleep. The first seven months of 2020 also saw a 1087.5% rise in apps for COVID-19; there are now more than 750 apps to help inform, track or gather data in this space. However, despite the increasing prevalence of long COVID, there is no evidence of apps dedicated to supporting this group of patients.







# The highest-performing apps

A high number of apps isn't always a good thing. It can make it harder for clinicians and patients to find the best apps. ORCHA has reviewed more than 6,500 apps against hundreds of measures. Because of this, we can pinpoint the apps that meet the appropriate clinical, data and usability standards.

Within weeks of national lockdowns, we updated our app reviews to identify apps that are particularly relevant to supporting COVID-19 efforts, adding additional information. Every quarter we have shared our data insights, providing an indication of how the demand for healthcare is rapidly changing, and revealing the most popular health apps.





## Coronavirus Advice



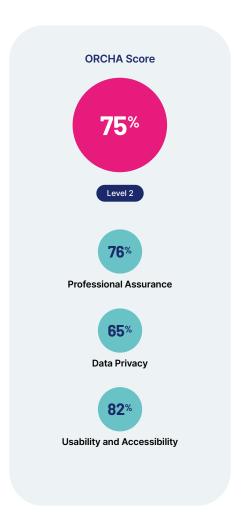
## **Coronavirus Support App**

Developer: Expert Self Care Ltd

## **Description:**

The app enables NHS organisations and local authorities to make reliable health information instantly accessible, promote safe self-care and signpost sources of support. The app provides information, support and reassurance to help people: assess COVID-19 symptoms, address mental health problems, know what to do if you are an at risk group.





"As a GP, I have been recommending this app to patients throughout the pandemic, as it contains a vast amount of expert-authored and reviewed material, covering everything from hand-washing to financial support during the COVID-19 pandemic."

Dr. Tom Micklewright, MBBS, MRCGP

Click here to access the Apple review



## Coronavirus Advice



**NHS 24** 

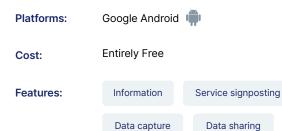
Developer: NHS24

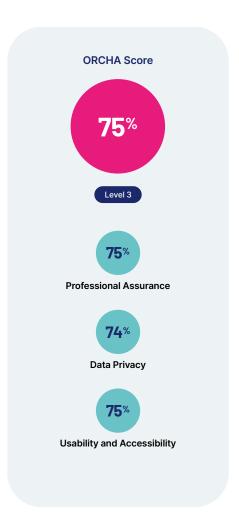
## **Description:**

This app provides content from Scotland's national health information service including the very latest clear, authoritative and factual clinical guidance on coronavirus, an easy-to-use coronavirus symptom checker, an interactive guide on accessing a coronavirus test, an interactive guide on checking if you need to self-isolate because of coronavirus and an interactive guide which allows you to find out if you are eligible for the free flu vaccine.

## Note:

Note. This app contains Scottish policy and services and so only some of the features will be relevant outside of Scotland.





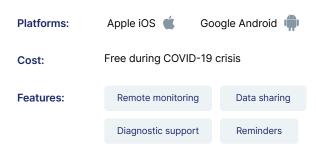


## **Palpitations**



## **Description:**

By placing a finger over the camera on a smartphone for 1 minute, Fibricheck is able to measure a patient's heart rate, rhythm and symptoms. It achieves equal performance compared to a single-lead ECG. This relevant, real-time data provides actionable information indispensable for an effective tele-consult.





"As a GP it empowered me in my skills and became a 'contact less way' of getting important information on heart activity that is so much needed to undertake important clinical decisions. FibriCheck is quick, reliable and user friendly."

Dr Shabana Ali. Clinical Director and Commissioning Lead at Redbridge CCG, GPwSI Cardiology North East London NHS Foundation Trust, GP Principal Southdene.

Click here to access the Apple review



## **Palpitations**

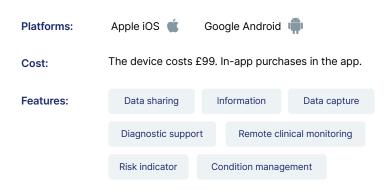


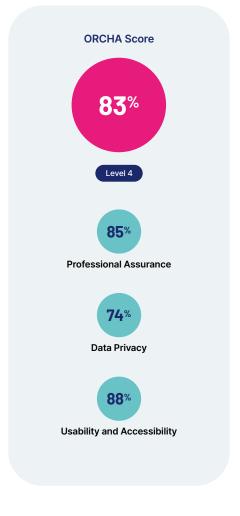
## Kardia

Developer: AliveCor, Inc.

## Description:

The Kardia app works with a hardware device and Apple Health to create a combined view of heart metrics, including providing an accurate medical-grade EKG recording. By putting your finger on the device, the app provides an immediate analysis of normal, possible atrial fibrillation, bradycardia, or tachycardia. Data can be shared remotely.





Click here to access the Apple review



## Brain fog and cognitive problems



## **Lumosity: Brain Training**

Developer: Lumos Labs, Inc.

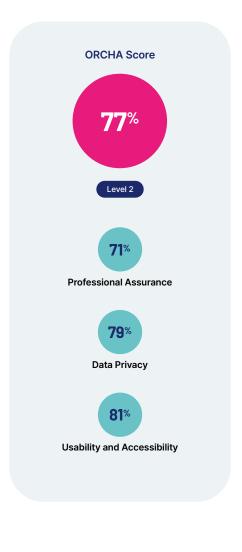
## Description:

Lumosity features science-based games designed to exercise memory, attention, speed, flexibility and problem-solving.

Users begin with a free 10-minute Fit Test to set a baseline score. It gives qualified researchers free access to training and tools, helping them investigate new areas in cognition.

There is the option to buy Lumosity Premium at £8.99, to access a personalized training program and unlock in-depth insights.





Click here to access the Apple review



## Depression



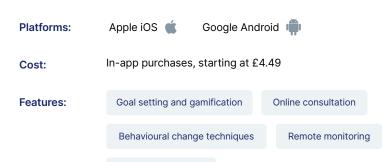
## Wysa

Developer: Touchkin

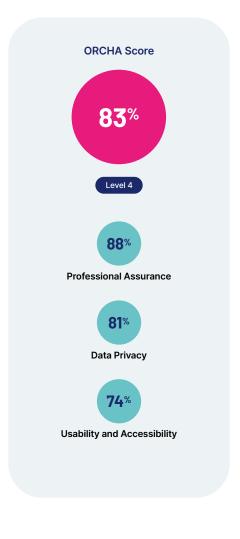
## **Description:**

Wysa includes an AI chatbot and mood monitoring that helps fight stress and anxiety. It also includes more than 100 AI-guided selfcare exercises to help patients deal with issues ranging from body image to breakups. Each is backed by science and hand picked by therapists.

Wysa offers the option of getting support in a more traditional sense in conjunction with or as an alternative to the automated service. Its users can receive support from real-life mental health professionals for a fee.



Service signposting



"We receive consistently high feedback from young people that the app has allowed them to feel more confident but that it has also helped them practice speaking to others and therefore makes coming to therapy easier if that is what is needed".

Emma Selby, Digital Lead, NELFT

Click here to access the Apple review

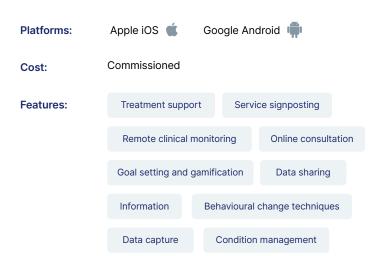


## Depression



## Description:

SilverCloud provides tools, content and interactive programs, for mental and behavioural health issues. Programmes address concerns including wellbeing, anger management, stress management, relaxation and sleep management. The app requires a SilverCloud account commissioned by a healthcare service.





Click here to access the Apple review



## Fatigue



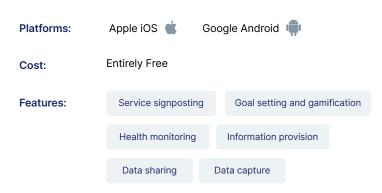
## One You Active 10 Walk Tracker

Developer: Public Health England

## Description:

Developed by Public Health England, Active 10 is a free and easy to use walking app that tracks your walking and shows you how to increase the intensity of your walk to benefit your health. The app is designed to increase your daily level of physical activity, with simple and achievable milestones and rewards along the way.

Note: Pending direct evidence from research studies, we suggest that exercise in patients with fatigue should be undertaken cautiously and cut back if the patient develops fever, breathlessness, severe fatigue, or muscle aches.





Click here to access the Apple review



## Insomnia



## Sleepio

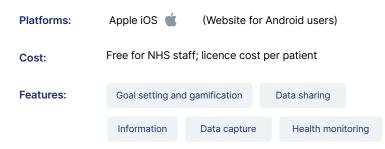
Developer: Big Health Ltd

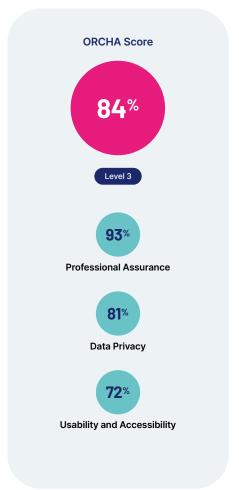
## Description:

Sleepio is a personalized program of Cognitive Behavioral Therapy (CBT) techniques. Over a number of tailored sessions the user is taught a range of cognitive and behavioral techniques, designed to get a sleep schedule, thoughts and lifestyle into shape.

The software imports tracked sleep data from a phone's health app to automatically personalize the program. If a patient chooses not to connect, sleep can be tracked by filling out a short form in the mornings.

The app was designed by sleep expert, Professor Colin Espie, University of Oxford.





Click here to access the Apple review

For Android users, Sleepio offer a web based solution



## Joint and muscle pains



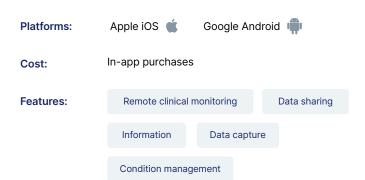
## Manage My Pain

Developer: ManagingLife

## Description:

A patient can use this pain management app to replace a hand-written pain diary, pain journal, pain log and pain tracker.

It helps a patient to describe their pain in less than 30 seconds, take their mind off pain and record activities that are meaningful to them, spot patterns and trends and track how well a medicine is working.





Click here to access the **Apple** review



## Conclusion

A significant proportion of the population is experiencing long COVID symptoms, which significantly impacts their quality of life and brings new demand to primary care and community services, at a cost of up to £1.8m. In a new world, with uncertainty and an evolving presentation of symptoms and evidence, digital offers new and flexible ways to support and maintain contact with patients. But we should not rush to recommend any technology. Giving the right app to the right patient at the right time matters.

There is also the opportunity for developers to work with patient groups and clinicians to meet any specific needs that this sizeable market may have that are not yet met.

Whilst health bodies outline the need for digital in effective self-management, there are thousands of apps available with varying quality levels. As such, NHS services must select only apps that meet the required measures and standards. Look for these within your organisation, check an ORCHA app library or ask ORCHA to test an app you are considering recommending to a patient.

ORCHA app libraries include a wide range of apps to help manage cough and shortness of breath, fatigue, headache, palpitations, chest pain, joint pain, physical limitations, depression, and insomnia. Crucially, the libraries are a live resource that keeps up to date with the market. When an app introduces an update, it is automatically run through the ORCHA 350+ point review, to make sure it still meets clinical, data and usability standards.

In the fast-paced world of digital health, for patient safety and governance, it is important that you reference this up-to-date information.

Access the ORCHA App Library at **appfinder.orcha.co.uk** or get in touch to commission a bespoke library for your services.



## MAIN OFFICE

SCI-TECH DARESBURY VANGUARD HOUSE KECKWICK LANE DARESBURY WA4 4AB

## TELEPHONE

+44 (0) 1925 606542

HELLO@ORCHA.CO.UK

## LONDON

ORCHA SPACES 307 EUSTON ROAD LONDON NW1 3AD

## AMSTERDAM

ORCHA HEALTH, B.V. STADSPLATEAU 73521 AZ UTRECHT







SEARCH FOR ORCHA HEALTH