

Oximetry @Home

Keeping patients safe and well at home,
and out of hospital



Background

Hospitals across the UK are under pressure from increasing numbers of admissions year on year. Virtual Wards and remote monitoring create capacity in the system, by caring for patients at home, and not in hospitals.

One of the early breakthroughs in the treatment of COVID-19 was the identification of silent hypoxia – the presence of low blood oxygen levels in a patient who might not otherwise seem unwell – as a symptom that requires urgent medical attention.

Solution

The COVID Oximetry@home (C@OH) service has been designed to support identification and management of patients at risk of deterioration. It enables healthcare professionals to monitor patients with confirmed or suspected COVID-19 in their own homes.

Across many parts of the country, the NHS is now using a simple monitoring device called a pulse oximeter to measure patient oxygen levels and pick up on early signs of deterioration which may suggest a patient requires urgent care.

Thorough monitoring reduces the risk of hospital admissions.

The service also enables earlier discharge from hospital, allowing patients to recover at home and reducing the need for face-to-face contact, minimising the spread of the virus while freeing up staff time and beds.



This service was very helpful and it was reassuring that someone was checking on me three times a day because living alone with COVID-19 is very scary and lonely.

COVID-19 Patient

How the service works

Patients are given an oximeter to monitor their oxygen saturation levels, and report these readings alongside other vital sign readings including oxygen levels, pulse rate and temperature, on a regular basis to their healthcare team.

The service also asks patients a series of questions which include questions around wellness and breathing but can be tailored to meet your specific requirements.

Patients submit readings using a communication method that suits them. This includes SMS, app, email or automated phone call, or by direct contact, meaning the service is truly inclusive. Healthcare professionals can use a tablet or desktop computer to access the app.

The service enables healthcare professionals to track patients over time, meaning changes in health can be quickly identified. Patient readings integrate with the GP record including SystemOne and EMIS Web.



Because I don't have a smartphone I got stressed about reporting my readings but the Covid@home team were great and they'd call me on my home phone 3 times a day so I could report my results.

Sussex CO@H patient



The automated phone call to monitor my readings was excellent and if any of my readings were out of range, I had a phone call not long after to check up on me

COVID-19 Patient

Outcomes

Research shared by Dr Matt Inada-Kim, national clinical director for deterioration at NHS England, shows the COVID Oximetry@Home service "considerably improved patient outcomes reducing the odds of longer length hospital stays and mortality".



6.3 days

Hospital length of stay was reduced by an average of 6.3 days for CO@H patients in comparison to non-CO@H patients.

3.6%

Only 3.6% of CO@H patients were admitted to ICU compared with 8.2% for non-CO@H.

5.8%

5.8% of CO@H patients died within 30 days compared to 20.5% of non-CO@H patient.