A mixed-methods evaluation of remote home monitoring models during the COVID-19 pandemic in England

Submission date 05/02/2021	Recruitment status No longer recruiting
Registration date 19/02/2021	Overall study status Completed
Last Edited 10/10/2023	Condition category Infections and Infestations

- [X] Prospectively registered
- [X] Protocol
- [] Statistical analysis plan
- [X] Results
- [] Individual participant data

Plain English summary of protocol

Background and study aims

During the first wave of the COVID-19 pandemic, some patients were not admitted to hospital until they were displaying advanced symptoms of COVID-19. These patients may then have received invasive treatments and/or been admitted to intensive care. Monitoring patients at home may help to reduce these delays and identify patients earlier.

In the UK, a healthcare service called COVID Oximetry @home has been nationally rolled out by NHS England. In COVID Oximetry @home, patients receive COVID care at home. As part of this service, patients are given an oximeter and asked to record their oxygen levels regularly. Patients are monitored and sent for further care if problems arise.

Previous research has looked at home monitoring for other conditions, but no research has looked at whether COVID care at home is effective, how patients experience and engage with COVID care at home and how staff find delivering COVID care at home. This study aims to evaluate patients' experiences of receiving the COVID care at home service.

Who can participate?

Persons aged 18 years or older who have been offered or care for someone who was offered the COVID Oximetry @home service.

What does the study involve?

To find out about patients' experiences of receiving and engaging with the COVID care at home service, the researchers will carry out a national survey and conduct some interviews in 14 selected NHS sites. They will conduct a national survey with patients and carers in up to 25 NHS sites across the country. The surveys will explore patient experiences of receiving COVID care at home. They will carry out some case study interviews win 14 selected NHS sites and speak with patients who have received COVID care at home, or who have withdrawn from receiving care or declined care. These interviews will help to find out more about how people experienced receiving COVID care at home and the things that help or get in the way.

What are the possible benefits and risks of participating?

The researchers will be conducting surveys and interviews with patients and family members

about their experience of receiving the COVID Oximetry @home service. It is therefore possible that discussing their experience of receiving care whilst experiencing COVID-19 could cause distress. To address these concerns, the researchers will ensure that questions within the survey and interview topic guide are presented sensitively. To do this, they have already sought feedback from their research team's patient and public involvement (PPI) members. They will also state in the information that participation is voluntary and that participants are free to withdraw. Where applicable the researchers will seek to signpost patients to relevant support groups. Secondly, patients may be hesitant to raise criticism of the service that they have received. To address this, the researchers have highlighted on the information sheet that the research team are independent of those delivering care and that there are no right or wrong answers. They will also emphasise that responses will be fully anonymised. They will highlight to participants that they would like to learn about the things that do not work well, in order to improve these for future participants.

The researchers will involve patients, carers and public involvement throughout the project. For example, they have already spoken with some patient representatives to find out their views on the project and the types of questions that they will ask during the surveys and interviews. The researchers will also be piloting the survey and interview questions with patients who have received COVID care at home. Later on in the project, they will also ask for patient and healthcare professionals' views on their findings.

Where is the study run from?

This is a collaborative project between BRACE and RSET (two NIHR HS&DR programme rapid evaluation teams) with input from colleagues at Public Health England (PHE), NHS England (NHSE), NHS Digital and NHSX, and with other research teams working in this area.

When is the study starting and how long is it expected to run for? November 2020 to June 2021

Who is funding the study? National Institute for Health Research (NIHR) (UK)

Who is the main contact? Pei Li Ng pei.ng@ucl.ac.uk

Contact information

Type(s) Scientific

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Public

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number 294011

ClinicalTrials.gov number Nil known

Secondary identifying numbers IRAS 294011, CPMS 48381

Study information

Scientific Title COVID Oximetry @home (CO@h): a rapid patient experience study

Acronym CO@h

Study objectives

 What are the experiences and behaviours (i.e. engagement with COVID Oximetry @home (CO@h), use of other services) of patients in CO@h?
 Do these experiences and behaviours vary by type of model, patient characteristics, and mode of remote monitoring?

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 12/02/2021, London - Bloomsbury Research Ethics Committee (HRA RES Centre Manchester, 3rd Floor Barlow House, 4 Minshull Street, Manchester, M1 3DZ, UK; +44 (0) 2071048285; bloomsbury.rec@hra.nhs.uk), REC ref: 21/HRA/0155

Study design

Multicenter observational mixed quantitative/qualitative study

Primary study design Observational

Secondary study design Cohort study

Study setting(s)

Home

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

COVID-19 (SARS-CoV-2 infection)

Interventions

The study will carry out a national survey and conduct some interviews with patients and carers who have received COVID care at home, or who have withdrawn from receiving care or declined care.

The national survey of patients and carers will aim to capture the experiences of patients who have received COVID oximetry @ home, and their engagement with the service. The researchers will recruit patients and carers from as many NHS sites as possible (as COVID oximetry@ home has now been rolled out nationally). Staff from NHS sites will send the survey to their patients who have received COVID oximetry @ home, via text or post. The researchers will ask patients to complete the survey. If patients do not want to complete the survey or are unable to complete the survey, they will be able to allow their carer to complete the survey on their behalf. The patients and carers will complete the survey and return them directly to the research team (electronically on the survey platform, or via post for paper copies). The survey will take between 15 and 30 minutes to complete.

The researchers will aim to carry out one-to-one interviews with patients and carers in a sample of 14 NHS sites. These interviews will explore patient experience and engagement in more depth. The researchers will also aim to explore the views of those who have withdrawn from the service or declined participation. They aim to speak to six patients from each site (four who have received the COVID Oximetry @ home service and two who refused to receive the service or have withdrawn from the service). If patients do not want to take part in the interview or are

unable to take part in the interview, the researchers will ask patients if they can approach their carer (if they have one) to capture their experiences. The interviews will take between 30 minutes and 60 minutes, depending on how much patients have to say.

Intervention Type

Other

Primary outcome measure

Behaviours and experiences of patients and carers who have received the COVID Oximetry@home service, assessed using a national survey and interviews once the patients have been discharged from the service

Secondary outcome measures

There are no secondary outcome measures

Overall study start date 02/11/2020

Completion date 30/06/2021

Eligibility

Key inclusion criteria

- 1. 18 years or over
- 2. Proficient in English
- 3. Eligible to receive COVID Oximetry @ home

4. Must have been offered and either received or refused the COVID oximetry @ home service 5. Care for someone who was eligible to receive COVID oximetry @home, and who received or refused COVID oximetry @home

Participant type(s)

Mixed

Age group Adult

Lower age limit 18 Years

Sex Both

Target number of participants 1,072

Key exclusion criteria

Participants will be excluded from the study if they do not meet the criteria for the COVID Oximetry @ home service

Date of first enrolment 23/02/2021

Date of final enrolment 01/06/2021

Locations

Countries of recruitment England

United Kingdom

Study participating centre

Hammersmith Hospital NIHR CRN: North West London Imperial College Healthcare NHS Trust 3rd Floor Administrative Block South Du Cane Road London United Kingdom W12 0HT

Study participating centre NHS Gloucestershire CCG

Sanger House Valiant Ct Gloucester Business Park Gloucester United Kingdom GL3 4FE

Study participating centre NHS West Leicestershire CCG 55 Woodgate Loughborough United Kingdom LE11 2TZ

Study participating centre NHS East Lancashire CCG Walshaw House Regent Street Nelson United Kingdom BB9 8AS

Study participating centre Royal Free Hospital Royal Free London NHS Foundation Trust Pond Street London

United Kingdom NW3 2QG

Study participating centre NHS Dorset CCG Vespasian House Bridport Road Dorchester

United Kingdom DT1 1TG

Study participating centre Salford Royal Hospital

Salford Royal NHS Foundation Trust Stott Lane Salford Manchester United Kingdom M6 8HD

Study participating centre West Hertfordshire Hospitals NHS Trust Watford General Hospital Vicarage Road Watford United Kingdom WD18 0HB

Study participating centre NHS Bristol, North Somerset and South Gloucestershire CCG South Plaza Marlborough Street Bristol United Kingdom BS1 3NX

Study participating centre NHS Derby and Derbyshire CCG Cardinal Square 10 Nottingham Road Derby United Kingdom DE1 3QT

Study participating centre North Bristol NHS Trust

Southmead Hospital Southmead Road Westbury-On-Trym Bristol United Kingdom BS10 5NB

Study participating centre Whittington Health NHS Trust The Whittington Hospital

Magdala Avenue LONDON United Kingdom N19 5NF

Study participating centre NHS West Hampshire CCG

Omega House 112 Southampton Road Eastleigh United Kingdom SO50 5PB

Study participating centre NHS North Hampshire CCG Central 40 Lime Tree Way Crockford Lane Chineham Business Park Chineham Basingstoke United Kingdom RG24 8GU

Study participating centre NHS Tees Valley CCG

North Ormesby Health Village First Floor, 14 Trinity Mews North Ormesby Middlesbrough United Kingdom TS3 6AL

Study participating centre NHS Shropshire CCG William Farr House Mytton Oak Road Shrewsbury United Kingdom SY3 8XL

Study participating centre NHS Telford and Wrekin CCG Halesfield 6 Epic Park Telford United Kingdom TF7 4BF

Study participating centre Cornwall Partnership NHS Foundation Trust Carew House Beacon Technology Park Dunmere Road Bodmin United Kingdom PL31 2QN

Study participating centre

NHS Isle of Wight CCG Unit a The Apex St Cross Business Park Newport United Kingdom PO30 5XW

Study participating centre NHS Portsmouth CCG 4th Floor

1 Guildhall Square Portsmouth United Kingdom PO1 2GJ

Study participating centre

Wrightington, Wigan and Leigh NHS Foundation Trust Royal Albert Edward Infirmary Wigan Lane Wigan United Kingdom WN1 2NN

Study participating centre Royal Cornwall Hospitals NHS Trust Royal Cornwall Hospital Treliske Truro United Kingdom TR1 3LJ

Study participating centre NHS Devon CCG

County Hall Topsham Road Exeter United Kingdom EX2 4QL

Study participating centre King Edward VII Hospital

NHS East Berkshire CCG St Leonards Road Windsor United Kingdom SL4 3DP

Study participating centre NHS Wakefield CCG White Rose House

West Parade Wakefield United Kingdom WF1 1LT

Study participating centre St. Martin's Hospital NHS Bath and North East Somerset, Swindon and Wiltshire CCG Clara Cross Lane Bath United Kingdom BA2 5RP

Sponsor information

Organisation University College London

Sponsor details

1st floor, Maple House (Suite B) 149 Tottenham Court Road London England United Kingdom W1T 7DN +44 (0)2034475696 pushpsen.joshi1@nhs.net

Sponsor type

University/education

Website

http://www.ucl.ac.uk/

ROR https://ror.org/02jx3x895

Funder(s)

Funder type Government

Funder Name National Institute for Health Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type Government organisation

Funding Body Subtype National government

Location United Kingdom

Results and Publications

Publication and dissemination plan

Throughout the project, the researchers will regularly share feedback on their findings. They will share this information through their networks and findings will be available on their website. The researchers aim to publish their findings in academic journals and submit a final report to their funder, the National Institute for Health Research.

Intention to publish date

30/06/2022

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available as some of the data collected are identifiable personal data.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient- facing?
Protocol file	version V1.2	10/02 /2021	19/02 /2021	No	No
<u>Results article</u>	Observational results on impact of post-hospital remote monitoring	01/06 /2022	05/12 /2022	Yes	No
Results article	Observational results on impact of remote home monitoring	01/03 /2022	05/12 /2022	Yes	No
<u>Results article</u>	Patients' experiences and engagement	07/07 /2022	05/12 /2022	Yes	No
<u>Other</u> publications	Learning networks in the pandemic: mobilising evidence for improvement	07/10 /2022	13/02 /2023	Yes	No
<u>HRA research</u> <u>summary</u>			28/06 /2023	No	No
<u>Results article</u>	effectiveness, costs, implementation, and staff and patient experiences	31/07 /2023	10/10 /2023	Yes	No