NHS
Oxfordshire
Clinical Commissioning Group

OCCG SERVICE SPECIFICATION (2022/23)

Primary Care Covid Oximetry @ Home

1. Introduction

Early detection of silent hypoxia reduces mortality and morbidity for patients with COVID-19. The use of pulse oximeters for self-monitoring at home enables early signaling for patients and healthcare professionals. System partners have been recommended to set up models as rapidly as possible.

No part of this specification by commission, omission or implication defines or redefines essential or additional services.

2. Background

Primary Care Covid Oximetry @ Home (PCCO@h) is part of the ongoing response to the pandemic. To aid implementation of this early detection of deterioration model, NHSE published Pulse oximetry to detect early deterioration of patients with COVID-19 in primary and community care settings, which should be read alongside the COVID Oximetry @home standard operating procedure (PCCO@h SOP). From 2022 this has been supplemented by a distinct focus on remote monitoring and virtual wards across Place and System with a particular role for Assessment, monitoring and management of symptomatic COVId-19 patients in the community.

This LCS covers the monitoring requirements of the PCCO@h SOP. In Oxfordshire several practices instigated their own version of a PCCO@h from early in the pandemic, utilising a range of approaches and staff members, and many continue to do so. This LCS provides a clear framework for practices to set up PCCO@h for their patients using structured and clear resources for both practices and patients and a ready additional supply of pulse oximeters. National guidance also stipulates expectations for the service and the local implementation intentions for these follow below.

3. Service Outline

Learning from pilots and emerging practice, NHSE have developed a model and are recommending that all clinically suspected or confirmed COVID positive patients who are at higher risk from COVID (see definitions below), are supplied with an NHS pulse oximeter and clear instructions and guidance for patient self-monitoring with clinical oversight as appropriate during the first 10-14 days of their illness.

Entry Criteria:

COVID Oximetry @home pathway should be available to people who are:

- **i.** Diagnosed with COVID-19: either clinically or positive test result **AND**
- **ii.** Symptomatic **AND EITHER**
- **iii.** Aged 65 years or older **OR**
- **iv.** Under 65 years and at higher risk from COVID-19. Clinical judgement applies considering individual risk factors including comorbidities, learning disability, caring responsibilities and/or deprivation. Those not double vaccinated, or giving rise to significant clinical concern, are also eligible*.

Pregnancy is an important risk factor, and all pregnant women should be offered PCCO@h. In Oxfordshire this is a secondary care service and although it is anticipated that maternity teams will pick most of these patients up without need for primary care input, please be alert for COVID positive results in this cohort and ask women to inform their community midwife in the first instance. If your patient is not yet enrolled in midwifery care or has been recently discharged (delivered within the last 6 weeks) please contact the OUH maternity COVID team at covid.maternity@ouh.nhs.uk and they should take on monitoring of the patient.

Please see **Appendix 1** for an overview of the patient pathway. Note that if patients are escalated to secondary care, they will be enrolled into the secondary care monitoring service or virtual ward and thus can be discharged from primary care follow up.

**These criteria were correct at the time of publication. The latest information can be found here.*

Finally, note that PCCO@h has a monitoring role alongside developing therapeutic options. How PCCO@h fits alongside these therapies in the bigger picture of the NHS response to COVID is summarised in **Appendix 4**.

4. Service Delivery

To be delivered in conjunction with the National Standard Operating Procedure and the updated Pulse oximetry to detect early deterioration of patients with COVID-19 in primary and community care settings, in summary:

Referral
Patients with symptoms of COVID-19 may make direct contact with practices or be referred to practices by NHS 111, the COVID-19 Clinical Assessment Service (CCAS) and South Central Ambulance Service (SCAS). Communication from SCAS may purely be in written point-of-discharge summaries where patients are not conveyed but left at home with a PCCO@h monitoring pack and self-care instructions; practices will need to review these patient records against the entry criteria to determine whether patients need to be on-boarded. Practices will also need to on-board patients into the service having received notification of positive COVID-19 PCR or LFD test results if they meet entry criteria.

Triage
Patients enrolled in the service should have a standard assessment (with potential for face-to-face clinical assessment if deemed necessary), with shared decision making prior to entry onto the pathway and a discussion about any support requirements for patients or carers. This should happen as soon as possible and ideally the same day as receipt of referral or positive COVID-19 PCR or LFD test result. As per national SOP, patients should receive pulse oximeter and pack, ideally within 12 hours of the practice being aware of symptoms or positive test result. It is

anticipated that the majority of pulse oximeters/packs will be supplied by practices; however where a primary assessment occurs by another NHS service e.g. SCAS, supply of packs should occur by this third party directly to patients with the on board process and monitoring becoming responsibility of the practice, provided a) an appropriate referral is made to the practice (most likely written rather than verbal through standard channels) and b) the receiving practice is in agreement as judged by a suitable clinician.

On boarding
Patients entering the pathway should be provided with a pulse oximeter and supporting information (including a paper diary which is being made available in a variety of languages, or suitable app / regular call mechanism), contact details to report oximetry reading / symptoms, and clear safety netting instructions both in and out of hours.

Patients should be encouraged to record oximetry readings daily, usually three times a day. Through a shared decision-making conversation, they are also given the option of proactive contact(s) from the practice team throughout their illness through to day 10. This may be via appropriately agreed methods such as text message, e-mail, or a clinician or non-clinician led check-in phone call. Each option should ensure a same-day response is received from the patient.

Monitoring those who have COVID-19 and who are at greater than average risk Patients should receive text or email prompts, or check-in calls, as agreed during on- boarding. Check-in calls should confirm that the patient is using the oximeter and diary correctly, and that the readings are within range. The frequency of these calls can be reviewed with the patient.

A digital support tool was trialed through winter 2020-21 and unfortunately this was not fit for purpose. An alternative digital support tool is not planned for implementation currently, but if this changes the LCS will be updated accordingly, with appropriate notification and support to practices.

Recovery and discharge
Patients who do not show signs of deterioration within 10 days of onset of symptoms should be actively discharged and supplied with leaving information, safety netting and safe advice on how to return the oximeter if necessary. Patients may be on the pathway for a shorter period either if they have been awaiting a test result or this is negative, or subject to clinical review. Patients who remain notably symptomatic at 10 days should receive a further clinical assessment and action taken as clinically appropriate. Patients escalated to secondary care should be discharged from the primary care oximetry service once the discharge summary has been received from secondary care.

5. Reporting / Monitoring

The CCG has developed a digital platform with SCWCSU to support practices monitoring their patients through a practice level dashboard, which shows number of on-boarded patients weekly.

Practices are encouraged to use the Ardens COVID oximetry at home template* and will need to complete the following fields on the template for each patient as a minimum to be eligible for payment (*see section 7*):

1. COVID-19 confirmed using clinical diagnostic criteria code (only if the template isn't already displaying an entry relating to a positive test result/recent legitimate diagnosis).
2. Remote monitoring commenced – *NOTE: alternative national PCCO@h SNOMED code is now auto-coded by Ardens, which at time of inception in 2020-21 was not available*

3. Remote monitoring ended (at end of period of monitoring) – *NOTE: alternative national PCCO@h SNOMED code is now auto-coded by Ardens, which at time of inception of this LCS in 2020-21 was not available*

4. Oxygen saturations code (there may be several over the course of the monitoring period)

See Appendix 2 for full coding

*More information regarding the Ardens template and reporting see **Appendix 3**.

The CCG may request information on the number of unused Oximeters in stock at end of reporting period.

This will enable the CCG and NHSE to manage stock levels. Advance notice of one week for requests for additional oximeters is required, and/or when practice stock is at 50%. Please email occg.primarycarecontracting@nhs.net if you require further supplies of pulse oximeters.

SCWCSU will extract weekly data for reporting on practice caseload. The model will be subject to ongoing evaluation and adaptation.

6. Accountability

The Provider is ultimately accountable to the Commissioner for the delivery of this service.

7. Payment

A fixed payment of £150 per patient that meet the eligibility criteria, both on boarded and coded as per section 5 (see appendix 2). Practices do not need to invoice; payment will be made by Bacs at the end of each quarter from data extracted in the SCWCSU dashboard.

This includes

- Clinical oversight, monitoring (active monitoring where requested) and sign off.
- Where clinically beneficial, a patient may have the opportunity to keep the monitor. If it is to be re-used this fixed payment also includes delivery, collection, and cleaning of saturation probes (subject to national stock continuing to meet supply demand).

8. Service Duration and Termination

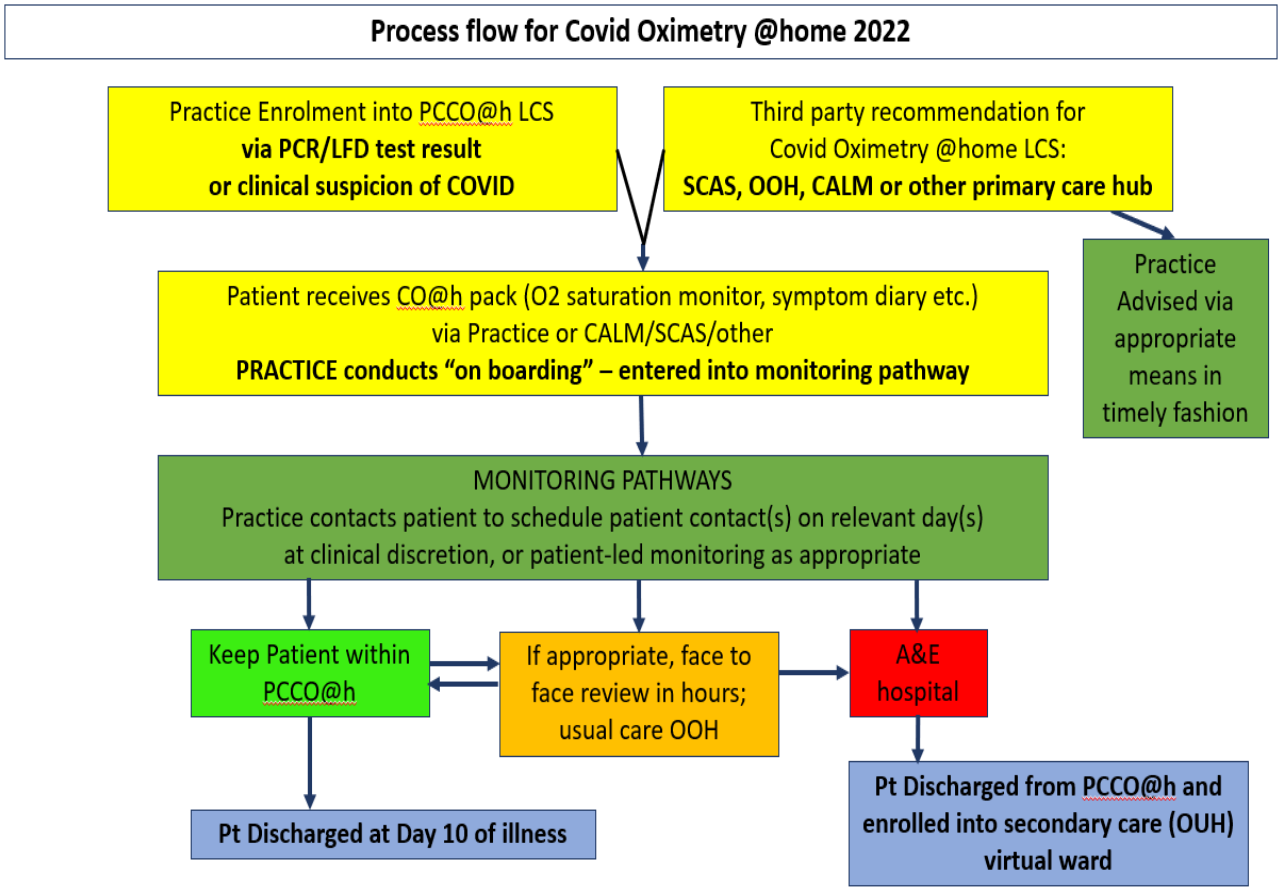
This LCS has been active since early January 2021. Other providers have set up rapid delivery models. A centralised system has been explored and changes may occur where working at scale will add value to the patient, system, and individual organisations. Should a centralised model be implemented, this LCS will be terminated.

The service will run from January 2022 until April 2023. A review will be undertaken to understand the ongoing need for a PCCO@h service. One months' notice will be provided if this service is to be terminated.

9. Contact

Contact for queries: occg.primarycarecontracting@nhs.net
Clinical lead: sam.hart-occg@nhs.net

Appendix 1: Oxfordshire Primary Care Covid Oximetry @ home (PCCO@h) – patient enrolment, monitoring and discharge



Appendix 2: Coding for Primary Care Covid Oximetry @ home (PCCO@h)

Definitions:

Cohort of eligible patients: Patients with a covid diagnosis (either lab or clinical judgement), who have symptoms (uncoded), age 65 or older OR under 65 but in high-risk group.

Patients 'on the remote monitoring register': Patients with a covid diagnosis (either lab or clinical judgement) AND Remote monitoring commenced AND without a later 'remote monitoring ended' code.

Payments: Patients on the register with remote monitoring commenced code AND a sats code recorded one week either side of the 'remote monitoring commenced'

Relevant codes for the above items are below:

	Item	SNOMEDCT ID	Fully Specified Name	Notes
Eligible Population	Age 65+ or under 65 at high risk, ie * with COVID diagnosis using any of the codes shown	12802201000006101	Confirmed 2019-nCoV (novel coronavirus) infection (EMIS code)	
		1240751000000100	COVID-19	
		840539006	COVID-19	
		1240571000000101	Gastroenteritis caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1240541000000107	Upper respiratory tract infection caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1300721000000109	COVID-19 confirmed by laboratory test	
		1300731000000106	COVID-19 confirmed using clinical diagnostic criteria	
		882784691000119100	Pneumonia caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1240551000000105	Pneumonia caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1240531000000103	Myocarditis due to disease caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1240521000000100	Otitis media due to disease caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		119731000146105	Cardiomyopathy due to disease caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1321241000000105	Cardiomyopathy due to disease caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1240561000000108	Encephalopathy due to disease caused by SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2)	
		1240581000000104	SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2) detection result positive	
		1324601000000106	SARS-CoV-2 (severe acute respiratory distress syndrome coronavirus 2) RNA (ribonucleic acid) detection result positive	
		1322781000000102	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen detection result positive	
		1324881000000100	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result positive at the limit of detection	
For exclusion	Remote monitoring not appropriate/declined	13487971000006102	EMIS code: Telehealth pulse oximetry monitoring not appropriate	In the last 2 weeks
		13488031000006103	EMIS code: Telehealth pulse oximetry monitoring declined	
		1325221000000101	Telehealth pulse oximetry monitoring not appropriate (finding)	
		1325241000000108	Telehealth pulse oximetry monitoring declined (situation)	

For payment	Oximetry commenced	897931000000108	*Working code: Remote care monitoring commenced*	
		13487941000006105	EMIS code: Telehealth pulse oximetry monitoring started	
		1325191000000108	Telehealth pulse oximetry monitoring started (situation)	
For payment	Oxygen Saturation on a week either side of the day as placed on register	447755005	Finding of oxygen saturation (finding) includes all the below:	
		1325701000000100	Oxygen saturation at periphery equivocal (finding)	
		1325691000000100	Oxygen saturation at periphery unknown (finding)	
		866661000000106	Peripheral blood oxygen saturation on room air at rest	
		866681000000102	Peripheral blood oxygen saturation on room air on exertion	
For information	Oximetry ended	897951000000101	*Working code: Remote care monitoring ended*	
		13487951000006107	EMIS code: Telehealth pulse oximetry monitoring ended	
		1325201000000105	Telehealth pulse oximetry monitoring ended (situation)	
For Information	Start of symptoms	520191000000103	Date of onset of symptoms (observable entity)	
	Provision of pulse oximeter	21801000000106	*Working code: Equipment loaned to patient (finding)*	
		13487961000006109	National code: Provision of pulse oximeter	
		1325211000000107	Provision of pulse oximeter (procedure)	

Appendix 3: Ardens template

Practices should use the Ardens Covid Oximetry@Home template. All Oxfordshire practices have access to Ardens and Resource Publisher so the template is automatically updated if there were any changes, so the latest version is always be available.

Technical issues with Ardens:

If you have trouble accessing the template, please email support-emis@ardens.org.uk and a member of the Ardens support team will assist.

Where to find more information:

The C@H page on Clarity: COVID Oximetry @ Home (clarity.co.uk)

Appendix 4: PCCO@h alongside therapeutic options

Adult primary care COVID-19 assessment pathway