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COVID-19 standard operating procedure

COVID virtual ward

Version 2.1, 24 January 2022

Updates made to this guidance since version 1 have been highlighted in yellow.

This guidance is correct at the time of publishing. However, as it is subject to updates, please use the hyperlinks to confirm any information you are disseminating to the public is accurate.

Contents

1. Requirement

All areas should pursue immediate roll out of a COVID 'virtual ward' model for earlier safe and supported discharge and as an alternative to admission if this model is not in place already. As a yardstick COVID virtual ward patient numbers should be a minimum equivalent of 15% of COVID inpatients. Implementation should be led by the local integrated care system (ICS) and delivered by appropriate secondary care providers, with potential additional support from community health services.

This is separate but complementary to COVID Oximetry @home (CO@h). Key differences between these pathways are set out in the table below.

	COVID Oximetry@home	COVID virtual ward
WHERE	Primary care supervised	Hospital supervised
WHO	Lower acuity/complexity	Higher acuity/complexity
WHEN	Community diagnosed patients	Emergency hospital patients
AIMS	**Safe admission avoidance and self escalation**	**Early supported hospital discharge safe admission avoidance**
HOW	Patient self monitoring/escalation **Earlier deterioration presentation**	Monitored service Reliable deterioration recognition
WHAT	Supportive treatments	+/- Dexamethasone, LMWH, O2 and other appropriate treatments

This document sets out a minimum requirement and should not supplant existing arrangements where these are already established and working.

2. Entry criteria

The COVID virtual ward (CVW) model should be available to individuals aged 16 years and above:

- in hospital with a primary diagnosis of COVID-19 who have an improving clinical trajectory (symptoms, function, oxygen saturation) and have no fever for 48 hours consecutively (without medication to reduce fever).
- who are seen in primary, community or secondary care or by ambulance clinicians where emergency admission is not warranted, but urgent oximetry follow-up is required.

See Section 4 for guidance on oxygen saturations and other clinical considerations.

3. Staffing and oversight

The default assumption is that the model is primarily implemented at system level by one or more acute trusts.

Legal responsibility, including ensuring appropriate clinical governance, remains with the relevant provider. Each system should have a named person responsible for the establishment of the service in their area. Clinical, governance and administrative responsibilities included in the pathway can be provided by any appropriately trained person and best use of resources should be made, including using isolating staff.

Providing a safe and robust CVW requires staffing for at least 12 hours a day (8am–8pm) seven days a week with locally arranged provision of out of hours cover. When discharged or admitted on to a CVW, patients are given a hospital number to call for any advice or support required during these hours which is provided by any health care support worker. These staff are clinically supervised by an experienced clinically registered professional who is also responsible for making the proactive daily calls, ie virtual ward round.

The CVW is led by a named consultant or ST3+ doctor with relevant COVID experience (usually an acute or respiratory physician). The workforce requirements are significantly less intensive than the patients being in an NHS bed.

Patients should be advised to self-isolate in line with current guidance.

4. Patient journey

Hospital discharge assessment (Stage 1a)

Subject to completion of a satisfactory exercise test:

1. Patients with saturations of 95-100% and low NEWS2 (< 3) and improving clinical trajectories **should be discharged** to a COVID virtual ward where clinically appropriate.
2. Patients with saturations of 93-94% with improving clinical trajectories (symptoms, signs, blood results, CXRs), function **can be considered** for COVID virtual ward where clinically appropriate.
3. Patients with oxygen saturations of 92% or lower or experiencing moderate/severe shortness of breath[1] or severe fatigue[2] are **generally unsuitable** for early supported discharge, unless the patient is stable and this is their usual baseline saturation.
4. Pregnant women with saturations >94% should not be excluded but early maternity involvement should be sought for specific advice around management of suspected acute respiratory infection including COVID-19 in pregnancy.

Clinical judgement remains paramount for all assessments particularly for COVID patients with higher risk factors or other complicating medical conditions.

[1] severe breathlessness is at rest; on minimal exertion; and/or unable to complete sentences
[2] severe fatigue can be defined as inability to carry out normal activities and/or struggling to get out of bed

Please note that in the cases of suspected COVID-19 patients who:

- have oxygen saturations 95-100%
- are without breathlessness or severe fatigue
- are without significant clinical concern

These are **low risk and should not be admitted to hospital, and may be suitable for self-monitoring using oximeters**.

Alternative to admission (Stage 1b)

Patients may be suitable for admission to a virtual ward when they:

- require daily active monitoring by health professionals (ie they are not appropriate for COVID Oximetry @home
- Have oxygen saturations > 94% (or NEWS2 < 2)
- Do **not** have any severe symptoms or signs of clinical concern.

Clinical judgement remains paramount for all assessments particularly for COVID patients with higher risk factors or other complicating medical conditions.

Onboarding to COVID virtual ward (Stage 2)

1. Patients being onboarded onto the COVID Virtual Ward will agree a discharge / escalation plan including monitoring arrangements and be given as a minimum a patient information leaflet, oximeter, instructions and diary.
2. Patients are given a hospital number to call for any advice or support between 8am to 8pm, seven days a week.
3. Patients onboarded onto the CVW are loaned an oximeter and given information about how they will be monitored and who to call if they need help or support as part of the onboarding process as they leave hospital. The onboarding process should therefore include provision of a patient held escalation plan that should assist remote assessment by 111/999/CVW/UCR team and help reduce inappropriate readmissions.

Monitoring on COVID virtual wards (stage 3)

1. Patient takes three readings each day with oximeter and enters reading in diary and asked to call the hospital number provided immediately if reading less than 92% or is decreasing. If this is not possible, they should attend their nearest emergency department within an hour or call 999.

2. Patient proactively contacted by phone everyday as they would be for a hospital-based ward round.
3. At 14 days (or before if deemed clinically appropriate) proceed to stage 4.

Recovery and discharge (stage 4)

1. The patient's general practice should be informed and their health record updated accordingly.
2. Patients may be on the pathway for a shorter period subject to clinical review.
3. Patients who remain symptomatic at 14 days should receive a further clinical assessment and action taken as clinically appropriate.
4. At the end of this stage, a friend or family member, or an NHS Volunteer Responder, collects and returns the oximeter for decontamination and reuse, as agreed as part of the onboarding conversation.

5. Oximeter supply and safe re-use

Oximeters for home use must meet ISO 80601-2-61:2017.

Particular care needs to be given to ensuring reliable arrangements are in place to provide oximeters to patients on onboarding, and their subsequent decontamination and reuse.

Acute trusts, clinical commissioning groups, ambulance and maternity services can request suitable oximeters in batches of 100, to be stored locally as appropriate for anticipated demand. Oximeters can be requested by emailing england.home@nhs.net. Once the order is agreed, delivery to the requesting acute trust will normally be made within three working days.

Prior to being distributed to patients, and on return from them, oximeters must be decontaminated in line with infection control policies for reusable electronic equipment. They must be checked that they are functional and safe for re-use prior to being allocated to new patients. This should be done in line with local and national guidance for reusable electronic clinical monitoring equipment.

It is important to note that systems must ensure there are wholly reliable local arrangements in place for timely distribution, decontamination, and re-use of sufficient oximeters.

Oximeters must be available on onboarding.

6. Coding, record keeping and data requirements

Systems will be required to provide daily number of patients onboarded onto COVID virtual wards alongside total caseload through the existing collection in COVID daily sitrep. The model will be subject to ongoing evaluation and adaptation.

7. Further support

Details of further advice, guidance and training materials including academic health science networks (AHSNs) and patient safety collaborative contacts for bespoke support are available on the NHS @home Future NHS platform: https://future.nhs.uk/NHSatH/grouphome.

If there are any issues accessing the site or for further queries, please email england.home@nhs.net.

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This publication can be made available in a number of alternative foramts on request.