Standard Operating Procedure
Remote monitoring in Acute Exacerbation of COPD
Early Supported Discharge

Current Document Information	
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Contents

1. Introduction

This policy outlines the use of remote monitoring in the acute exacerbation management of COPD, covering Early Supported Discharge (ESD), supported discharge by Imperial College NHS Trust (ICHT).

Remote monitoring covers the use of telephone alone support, or telephone support with digital enhancement (which are at this time point - Current health & Luscii).

The service involves:

• The AIR service provided by ICHT respiratory teams

• Remote monitoring Team- ICHT hub

Exacerbations of COPD are the 2nd most common cause of emergency admission to hospital in the UK, and the 5th most common cause of readmission.

ESD plays a key role in improving the quality of care for COPD patients by bringing specialist care closer to home, reducing the length of stay for unplanned hospital admissions, facilitating early discharge and improving patient education, support and self-management. It is an evidence-based intervention.

The COVID-19 pandemic has put significant pressure on the secondary care systems in the UK. Maintaining patient bed flow and bed capacity remains paramount during these times.

ICHT hospitals aim to reduce length of stay for patients admitted with acute exacerbations of COPD by utilising a Virtual ward approach. This will be alongside prevention of admission/re admission (alongside community teams) and supporting patients at home

Remote monitoring of patients through phone calls & digital tools allows clinicians to enhance current supported discharge pathways and offers more support to vulnerable patients at home during acute exacerbations, allowing clinicians to identify and mange any clinical deterioration proactively, and reassure patients and caregivers.

2. Purpose

The purpose of this Standard operating Procedure (SOP) is to set out the procedure and pathway for remote monitoring in addition to usual COPD Early Supported Discharge Policy (2017)

Scope

This SOP relates to the delivery of Remote Monitoring of COPD Patients during early supported discharge following acute exacerbation. It is applicable to all ICHT staff involved in the delivery of care of this pathway, patients, and healthcare staff from other organisations that help deliver community care such as the NWL remote monitoring hub, and community respiratory teams.

3. Function

- The function of remote monitoring is to provide virtual support for patients under the ESD pathway for *up to* two weeks following discharge.
- This service will be led by integrated respiratory consultants (Dr Sarah Elkin at St Marys and Dr. Vince Mak at Charring Cross) and supported by the integrated respiratory team (AIR team and community respiratory teams), acute respiratory consultants and remote monitoring hub team. It is not intended to replace the existing pathway but instead provide a complimentary mechanism to manage patients virtually within the current pathway. The hub increases capacity to moniter patients.
- Patients will be assessed by the respiratory teams in hospital and enrolled if considered suitable for early supported discharge to be managed at home with appropriate remote monitoring tools.
- Referrals should come via AIR team or respiratory team on respective sites
- Patients will be screened within 24 hours of hospital attendance for suitability to be managed on virtual ward. The level of virtual monitoring with appropriately assessed digital technology, phone calls or usual care will be determined by the severity of the patient's clinical presentation and

underlying respiratory illness, in line with COPD early supported discharge service policy (2020). The aim of the virtual ward is to discharge and support patients that would otherwise be in a hospital bed.

- The hub will be informed of suitable patients before discharge for on boarding and a handover clearly documented into cerner.(Appendix 8)
- Hub team will create a VW encounter in cerner and complete daily review documentation
- Once home, patients will remain under care of respiratory teams and hub with clear escalation pathways for advice and guidance /support for hub staff. The patient will be reviewed daily by the remote monitoring team and will have a call or escalation to the hospital or community teams
- Usual safety netting and whom to contact in emergency will be provided to the patients as per usual care as indicated in ESD policy (2020).
- All patients will be given a patient information sheet(attached) with clear information of what a virtual ward is and clear safety netting advice
- Patients will be risk assessed on initial assessment to guide which virtual device is most appropriate. Training and advice will be provided to the patient on how to use the digital device, how to input observations where required in the Luscii app/and how to set up the Current health device how to use these devices prior to discharge where possible
- Patients will be discussed at the weekly MDT meeting and the remote monitoring period adjusted, if indicated.
- GP's will be informed of the outcome of remote support during exacerbation of COPD once the patient is stable and discharged. An onward management plan will be clearly articulated including COPD discharge bundle and pulmonary rehabilitation referral. Usual follow up will be organised through either outpatient or community services(Appendix 3)

3.1 Operational requirements

- The respiratory (AIR) team will liaise as required with the acute medical team, community respiratory teams ,community rapid response team (RRT) and GP to ensure that appropriate information relating to patients are shared and escalation of clinical care undertaken appropriate.
- The respiratory (AIR) service operates Monday-Friday 09.00-17.00. Patient contact will be in the ward for initial assessment.
- If inner boroughs if required an initial home visit will be carried out by a member of the Community Respiratory team within 1 working day of discharge . A visit will be performed within working hours the day after discharge, unless there are specific reasons why it needs to happen on the same day.
- Patients will be reviewed by the hub staff and seen at home at a frequency deemed appropriate by the integrated respiratory team and the remote monitoring hub
- All patients will be given a hub telephone number to contact in case of deterioration.
- Weekend visits and any additional visits will be by the Rapid Response team (RRT) 8am-8pm.
- The respiratory service will inform the RRT if a pt is on remote monitoring, and provide them with the relevant contact numbers, for communitcation between the teams if indicated.
- Patients will be asked to contact 111 or GP out of hour's services, after 7pm. If acutely unwell to contact 999.
- A weekly MDT meeting will take place to discuss patients on the COPD discharge virtual ward . The remote monitoring teams will attend and handover first. The Integrated Respiratory teams, consultant and remote monitoring staff will discuss current patients and those who have been discharged since the last MDT. MDT discussions will be added to cerner.
- Any medical escalation (based on symptoms or pre set parameters at time of referral) will be coordinated with the respiratory consultant or on call medical team. The patients condition will be virtually monitored as per individualised protocol and COPD care plan implemented as per initial assessment, any concerns or complexities will be raised Via escalation telephone or via on call medical registrar during weekend/ out of hours and at the weekly MDT.
- The hospital medical records for patients discharged home from secondary care to the ESD service will be in Cerner until the patient is discharged from the ESD service. This will allow easy access for acute medical teams if the patient is readmitted.

3.2 Remote care pathways

Patients accepted for remote monitoring will be categorised into Three Remote care pathways. See Appedix 1 for detail of set up and monitoring process.

- Usual care

  Initial assessment (telephone or Face to face), followed by telephone reviews by the hub or community Teams until clinically improving. Aimed at patients unable to use technology or felt too mild to benefit from this.

- Luscii unstable app with usual care

  Initial assessment (telephone or Face to face), followed by telephone reviews by the remote monitoring Team once to twice daily for the first 5 days or until clinically improving, then reduce as required a final virtual assessment at 10 days should occur (or until clinically improving). Respiratory team contact will be initiated as required, according to remote monitoring team virtual findings. Aimed at patients with moderate exacerbations with moderate symptom burden and impaired ADL's, with moderate/Severe COPD & Risk of re-admission to hospital.

  Note: Not all pts on Luscii unstable with have spO2 monitoring. Suitability will be determined on an individual basis and in the absence of spO2 monitoring; symptoms will be used to guide escalation parameters.

- Current Health with usual care

  Initial assessment (telephone or Face to face), followed by telephone reviews by the remote monitoring Team once to twice daily for the first 5 days or until clinically improving, then reduce as required as per virtual assessment for 14 days or until clinically improving. Aimed at patients with moderate exacerbations with moderate symptom burden and impaired ADL's, with moderate/Severe COPD. Risk of re-admission to hospital. Frailer patients and Patient requiring Oxygen Therapy/ Short Term Oxygen therapy during exacerbation.

3.3 Inclusion and Exclusion criteria

Patients are suitable for referral if they meet all of the following Inclusion Criteria
Established diagnosis of COPD
No evidence of significant infection (tachycardia, pyrexia, hypotension)
pH > 7.35
pCO2 < 8 kPa on Room Air
PaO2 > 7.3 kPa on Room Air (Unless on Home O2)
Agreement by patient and carer / family to early discharge & home visits
Suitable social circumstances for home nursing (must have access to telephone)
Appropriate degree of home support if living alone.
Can communicate in English or a family member at home who can

Exclusion Criteria
Impaired Level of Consciousness
Acute Confusion
Suspected new underlying malignancy

Requiring IV medications
Acute changes on CXR (Significant consolidation / effusion)
Concomitant medical problem requiring inpatient stay
Acute ECG changes / suspected MI
Suspected pulmonary embolism/ CAP/ Pneumothorax/pulmonary odema
Cognitive impairment that prevents self care (unless sufficient care provided by a carer)

3.4 Staffing

- The remote monitoring team will consist of Acute Respiratory team including Respiratory consultants, AIR team- CNS and AHP practitioner at both sites (St Marys and Charing Cross), integrated respiratory team, acute medical consultants and Remote monitoring team.

3.5 Assessment to Discharge process (Appendix 1 &2)

- Patient will be clinically assessed as per the ESD, supported discharge proforma. Patients who are not suitable for remote monitoring will be monitored via telephone monitoring as required.
- Patients being on-boarded to remote monitoring will be advised of the remote monitoring processes for review, provided with relevant equipment, educated on its use and a patient information leaflet provided. The hub staff will be helping with this process.
- **Hub Contact details:** Mobile: **07385950852** Email: imperial.remotemonitoring@nhs.net
- Patients identified for monitoring will be admitted to the ICHT COPD Virtual Ward in Cerner, by the remote monitoring team.
- The integrated respiratory team will email imperial.remotemonitoring@nhs.net: Name, MRN/NHS number, DOB, Contact Number, Core and peripheral kit names given to patient. And send a copy to consultant
- RPM team to admit patient onto the Virtual Ward with a Virtual Encounter: Lead consultant for patients at SMH: Sarah Elkin, CXH: Dr Vincent Mak
- All patients will have a Remote Monitoring Hub – Escalation Point form completed on admission to VW by the Integrated Respiratory team. This should include the relevant Intergrated respiratory teams phone number. (see appendix 9)
- Patients will be given clear instruction to contact the Integrated Respiratory, Remote Monitoring team or 111 /999 if they experience any worsening of symptoms or observation outside of individual's set target.
- The respiratory (AIR) team or onboarding team will complete set up of Current Health or Luscii devices with patients.
- Remote monitoring team will monitor COPD patients for 7-14 days.
- Patients will be called once -twice on days 1-5 of monitoring by the remote monitoring team.
- After the first 5 days the remote monitoring team will monitor observations twice daily and will call the patient if they have abnormal observations/do not complete questionnaire or if there are technical difficulties. Patients will have daily contact via Current Health or Luscii, but will not recive routine daily phone calls after day 5 unless felt required
- The respiratory team will not routinely contact the patient after initial input, unless indicated on an individual basis or concerns are raised by the remote monitoring team.
- The remote monitoring team will document using COPD Daily Virtual Review form and complete an SBAR form for any escalations.
- All additional communications will be documented on cerner by the remote monitoring team and system1 by the community team.

3.6 Escalation (Appendix 4 & 7)

Identified Escalations for the remote monitoring team:

Contact AIR team or community team for Triborough patients,if there are concerns with:

- Worsening of Daily Assessment Symptoms (score >1 or change in score from baseline)
- Remote monitoring observations deteriorate outside set parameters.
- Concerns highlighted on telephone contact with patient.

Signs that an acute medical review may be indicated:

- Chest pain (Central/Radiating/Palpitations)
- Acute onset of Ankle Oedema
- Acute SOB, unable to speak in sentences
- Fever 38 +
- Confusion
- New onset Haemoptysis
- New Symptoms suggesting COVID
- NEWS >5

Depending upon patient's presentation AIR clinician will take action, in line with the Acute COPD Exacerbation Pathway Policy (2020). Any changes to a patient's management should be in agreement with the respiratory consultant or on-call registrar.

- If patient is not improving or deteriorating on maximal exacerbation therapy and clinical investigation demonstrates worsening abnormalities, then the clinician should liaise with the consultant or on-call registrar to consider admission.

<u>Factors to consider when deciding where to manage a patient during exacerbation:</u>

- Ability to cope at home/ Lives alone/ consider increase care package or onward referral, poor social circumstances. - Virtual ward may help with this as enables more support.
- Breathlessness MRC 4-5, signs of respiratory distress, use of accessory muscle, (patient should contact 999)
- General Condition (poor respiratory reserve, history of NIV) Significant Co-morbidity (particularly cardiac and Insulin dependent diabetes)
- Worsening Level of Activity and ability to manage ADL . this can be monitored with activity moniter.
- Worsening Peripheral oedema or evidence of decompensated CCF
- Drowsiness or reduced level of consciousness
- LTOT and risk/signs of acute C02 retention
- Acute confusion
- Rapid rate of onset of symptoms
- Worsening oxygenation(off baseline)
- Red Flags including Chest pain (central, radiating and palpitations), new onset of Haemoptysis, coryzal symptoms/suspicion of COVID-19
- Need for further investigations such as ABG, Chest X-ray
- New fever

3.7 Discharge from Remote Monitoring

Discharge Criteria:

- Completed treatment, Returning to baseline symptoms/ Near baseline/improving trajectory
- Sustained stable clinically observations and recovering from exacerbation
- Returned to usual inhaled therapy and has self-management plan/ COPD Bundle completed
- Follow up booked with specialist respiratory team in community or secondary care
- GP/ hospital consultant informed of discharge
- Patients who need extended monitoring needs to discussed in MDT
- Consent withdrawn for assessments or failure to engage with the team
- Re-admitted to hospital

- When deemed fit for DC, Remote Monitoring team to complete DC call and safety net the patient.
  Safety net conversation to include:
  -Highlight signs of deteriorating symptoms and action to take if emergency/not an emergency (999 vs 111/ACE).
  -Inform pt Remote Monitoring has ended and initial contact to be the integrated respiratory team or GP for community support.
- Remote Monitoring team to inform the Integrated (AIR) Respiratory team + link community respiratory team of DC call completion with pt.
- Patient will be discussed at weekly MDT and Bundle points & f/u appointment confirmed
- Integrated Respiratory team may not need to call the patient, unless concerns are highlighted from Remote Monitoring handover or the remote monitoring team request they call the patient if they have concerns.
- The Remote Hub team will collect remote monitoring kit as appropriate. This will not always be possible and teams will work with Hub staff on this and help maybe from community respiratory team or couriers
- Kit locations: SMH – Accrow East, Community respiratory offices, 1st floor. CXH – Central hub location: 2nd Floor East Wing, Digital Nursing and Midwifery Office.
- Integrated Respiratory team to clinell wipe all kit including the BP cuff. Replacement arm straps to be sourced from the remote monitoring team as required.
- Integrated Respiratory team to provide patient with one arm band only for the period on remote monitoring. This is to be disposed of after single patient use.
- Remote monitoring team to ensure that COPD team have 7 kits in the office at SMH.
- Remote monitoring team to complete discharge from Virtual Ward location.
- Integrated Respiratory team will complete discharge and onward referrals and letters, as indicated.
- All Patients should be advised that if self-monitoring oxygen saturations, that readings are taken after 5 minutes at rest and aware of their individuals target range and when to seek review.
- Once discharged, patients return to the care of their GP . Once known to the team, patients or their carers can self-refer to the community respiratory teams if they are unwell or having difficulty managing their COPD. Patients will be given the number of the Community Respiratory Teams to contact as necessary.

4. Governance

4.1 Clinical governance

All staff involved in the remote monitoring supported discharge will take a quality and safety approach and will be expected to operate within the relevant existing ICHT clinical policies and procedures. Remote monitoring adds enhanced support alongside usual GP care.

4.2 Patient Database

Patients referred to remote monitoring will have an encounter created under the appropriate integrated respiratory consultant at referral.

All patients accepted and enrolled onto the remote monitoring pathway will be added to the Cerner dashboard and a power form will be completed every day during the monitoring.

Imperial BI team collects data via Cerner for reporting

4.3 Documentation

All observations will be reviewed daily by the remote monitoring clinician and documented into Cerner using the power form and System one for community patients

All communication encounters with the patient or about the patient (i.e. MDT, Family, GP etc.) will be documented by the community team into Cerner and system one. The patient will be made aware of the above.

All correspondence relevant to the patient including discharge notification letter will be uploaded onto Cerner/ CDL.

LUSCII and Current Health Dash board will only be used to observe patient reported observations. It will not be used for clinical documentation.

4.4 Data security

The discharge support will be delivered in accordance and compliance with ICHT's IT and information governance policies. Patient data will only be downloaded onto devices provided by ICHT which are encrypted or via the Trust's remote access to IT system.

It is also recognised that many patients request communication by email. Sending emails outside NHSmail without encryption is not secure. The Trust does not rely on emailing patients as the preferred method of communication. However, if a staff member or patient wishes to correspond by email then the patient should acknowledge the **Email Privacy Notice** available in Organisational Forms on Microsoft Outlook. Emails should be filed in the patient's health record

Due to the COVID-19 pandemic, further information governance advice has been issued for HCPs: https://www.nhsx.nhs.uk/covid-19-response/data-and-information-governance/information-governance/covid-19-information-governance-advice-health-and-care-professionals/

Appendix 1. COPD Supported Discharge Assessment and Onboarding

Referral received via site AIR phone

St Marys : Bleep 2149 ext 27661 / Imperial.airteam@nhs.net

CHX; Mob: 07824409331, 07824409229 imperial.copdasthmanurses@nhs.net

Assess patient suitability:

- COPD VW guidelines criteria to manage at home
- Discuss with Integrated respiratory consultants/first floor Respiratory Team/Acute consultant

NO

If does not meet criteria: discuss with Medical team. Patient stay in hospital & reviewed until suitable for discharge

YES

- Air Team will gain patient consent for VW monitoring.
- Air Team will inform RM team for VW admission and onboard request via imperial.remotemonitoring@nhs.net Tel: **0203 704 3704**
- AIR team will complete escalation parameters including current observations (cerner: ad-hoc: Remote monitoring hub: RM hub - Escalation point).
- RM team to create encounter and add pt to VW dashboard on cerner (ICHT patient list and RM COPD list).
- RM/AIR team to set up patient with RM equipment prior to Discharge, provide the necessary education on device and contact numbers.
- Current health device or Lucii will be first choice. If unable to use telephone review can be provided
- Advice on normal parameters, Red flags and when to call 111/999.

Appendix 2. Remote Monitoring and Discharge Pathway

The RM team will moniter the patient twice daily and call 1-2 day (and continue this for the first 5 days). Following this, calls will be made based on the observation parameters

RM will monitor patient for a minimum of 7 days and a maximum of 14 days. Earlier D/C can be discussed at the local MDT meeting.

RM team will complete discharge call and will liase with community respiratoiry team once completed. All patietns will be discharged from MDT.

Home visits will be completed by the Community respiratory team (if inner boroughs), if indicated during time on RM or at the end of the treatment period.

At 7 days if patient continues to improve and observations at baseline, discharge back to GP

If not improving /not back at baseline

Discuss in Clinical MDT and arramge for face to face review with community team/ acute medical team and provide extended monitoring if needed

Advcie all patients to:

Return the Current health App/oxygen saturation probe so that, it can be used by another patient.

Current health device will be collected by the community team or the by RPM team

If suitable long term monitoring via Lucii app

If they feel their symptoms worsen / recur – they should consult their Community respiratory Team or GP

Discharge letter including follow up plan will be completed By Air team, using the template (see appendix 3)

Forward a copy to GP and attach a copy in patient cerner/CDL

Appendix 3. Discharge letter template

Imperial College Healthcare NHS
NHS Trust

Date:

Letter to GP: Dr Xxx XXXX
Address
Address
LONDON
POSTCODE

Name:
DOB:
NHS/Hospital No:

COPD Virtual Ward Discharge Letter

Patient was monitoried under the NWL virtual ward following their recent discharge from St Marys/ Charring cross/ Hammersmith Hospital after treatment for exacerbation of COPD. Patient has recovered well and now completed the extended monitoring period via virtual ward.

Admission/discharge date from hospital: 00/00/0000

Observations on last day of monitoring - date: 00/00/0000

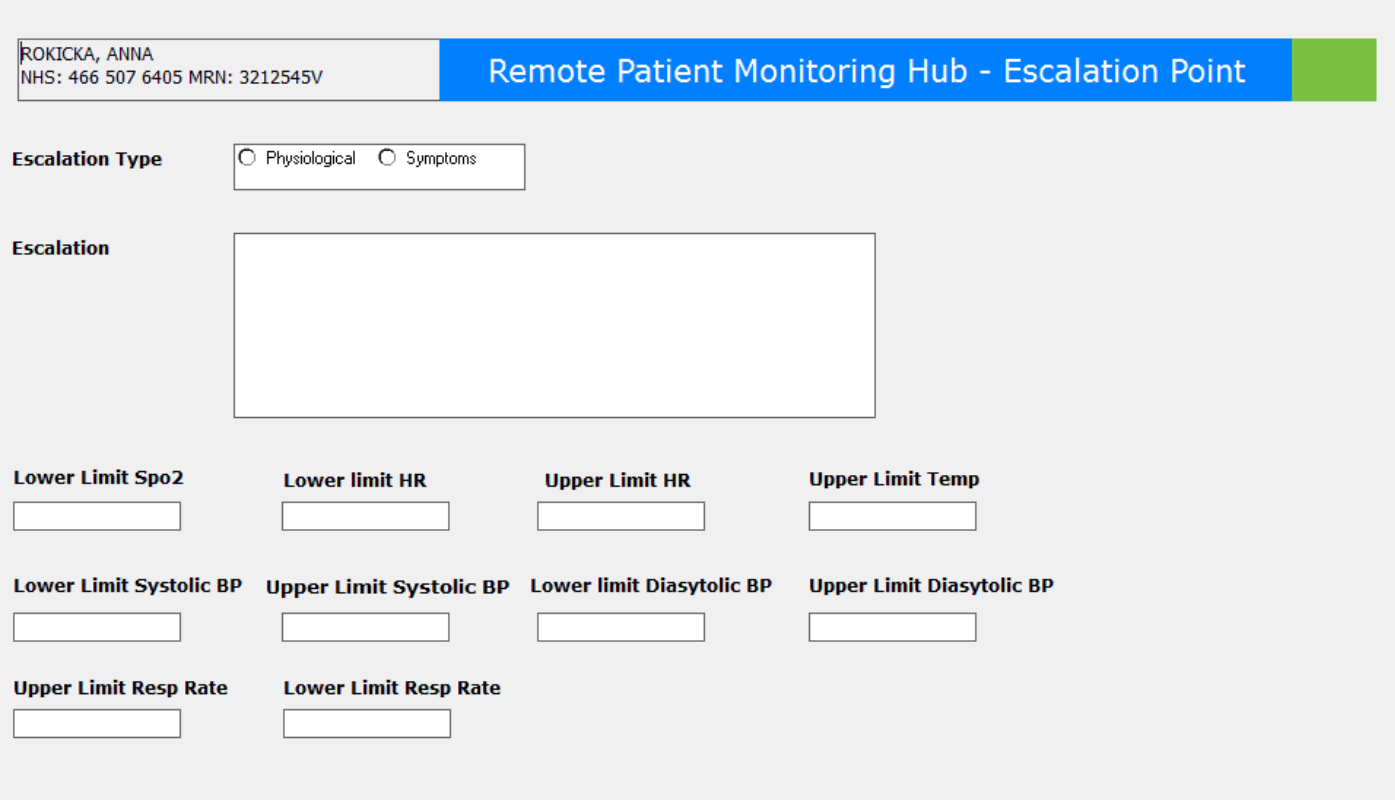
Further follow up arranged
Community team/ PR/ Oxygen/Secondary care clinic

Actions for GP

Yours sincerely
COPD Supported Discharge Team
Copy to Patient: Pt name, Address

Appendix 4

Escalation form and contact Numbers



Escalation numbers for Hub Team Mon- Fri 9-5

AIR TEAM (SMH)- 02033127661 (Non Tri borough patients Discahrged from SMH)

AIR TEAM (CXH)- 07824409331 (Non Triborough Patients discharged from CXH)

Community Resp Team (Central and west London)- 07506609186

Community Resp Team (Hammersmith and fullham)- 07957629023

Weekends Call / Bleep the oncall medical team –

Oncall medical Bleep 1209

Community Response (Rapid Response) across the Tri-Borough - 03000 330 333 – opt 2

Appendix 5

Hospital Presentation of COPD exacerbation

Can they be discharged home with Remote Monitoring?

Discharge Criteria

Confirmed COPD diagnosis and registered under tri borough GP Referral from A&E or acute take team.

See ESD policy for full criteria

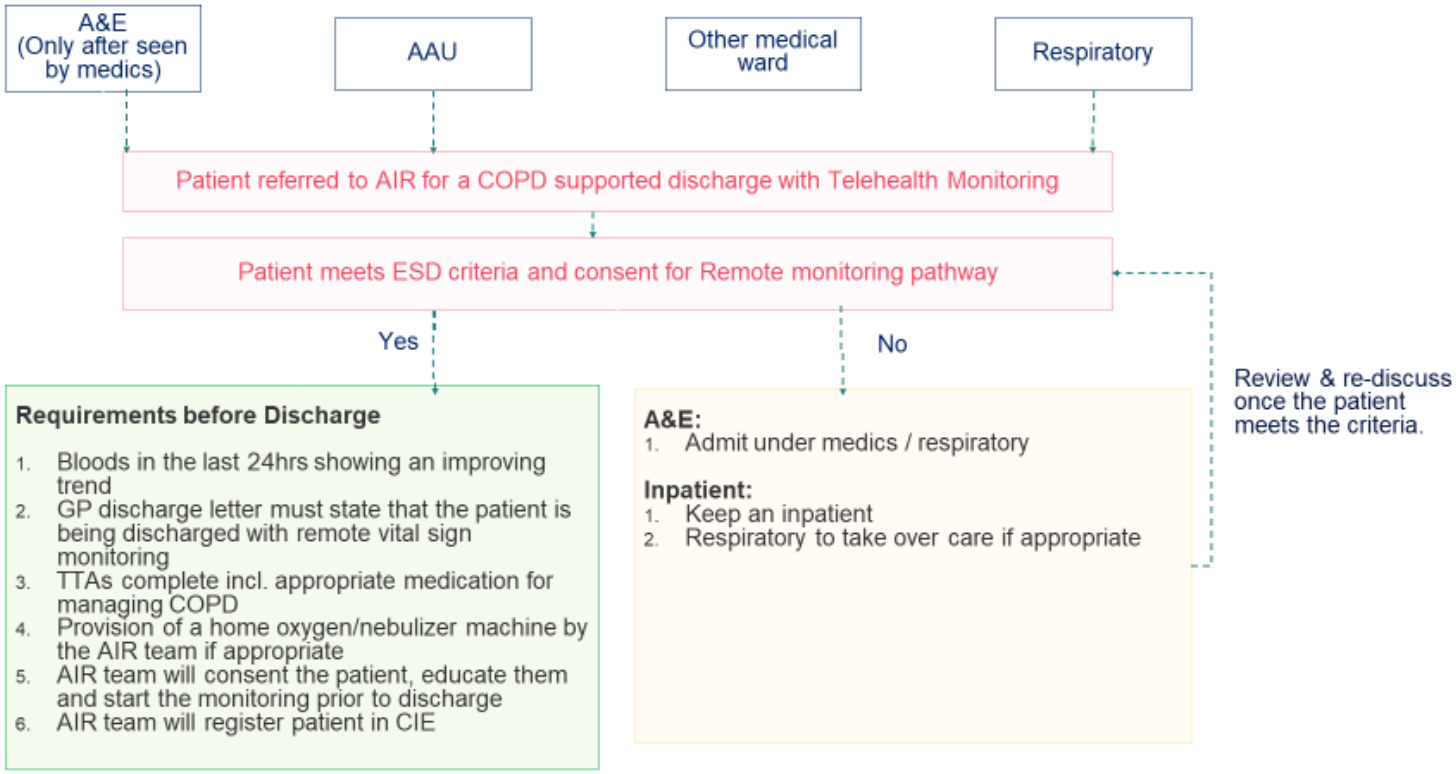
Social:
- Independent with ADLs
- Able to consent
- Can wear the Current Health device
- Has landline/ mobile phone

Respiratory
- Primary admission with an infective or non-infective exacerbation of COPD

Vital signs:
- Stable / improving NEWS

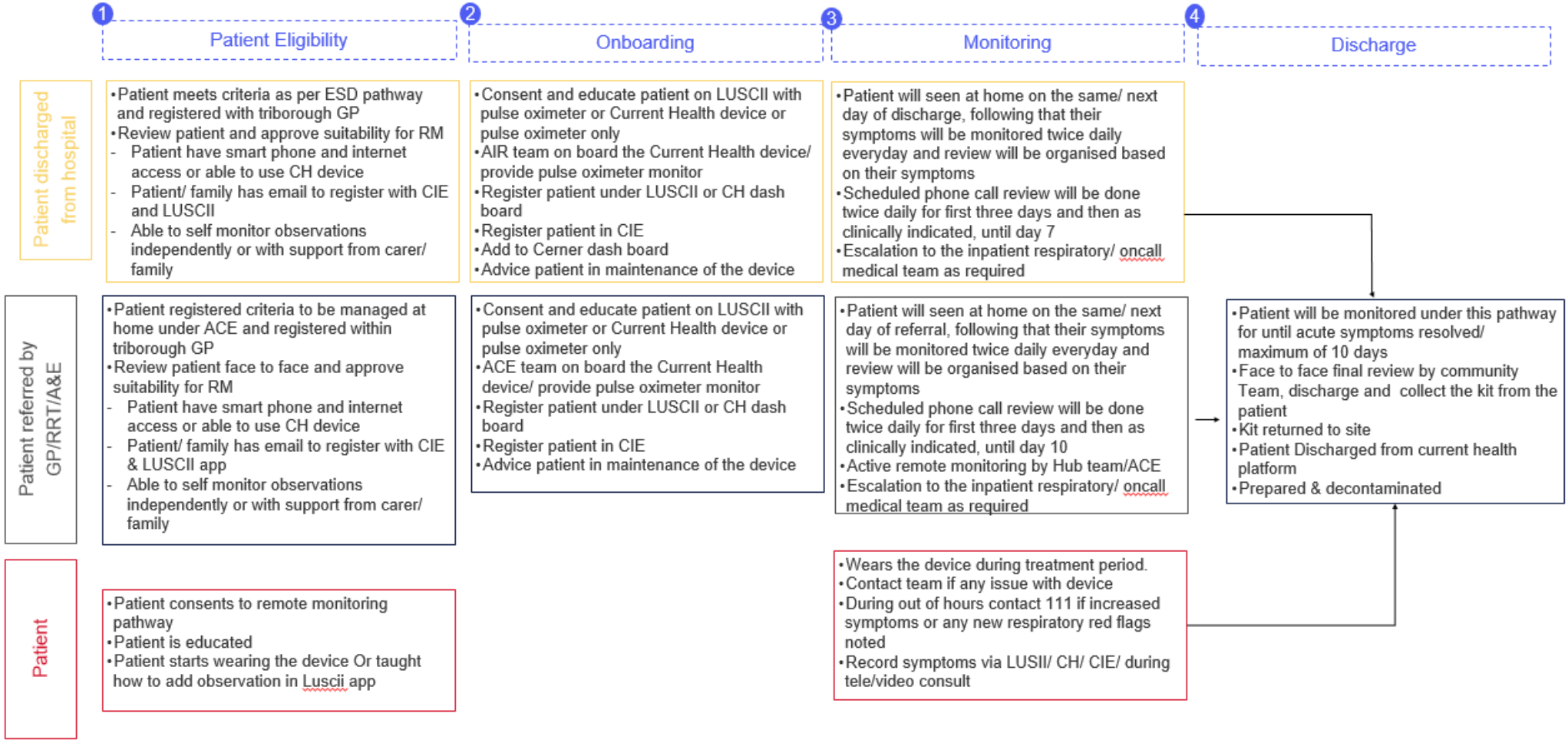
RM Criteria:
Access to Smart phone with Internet access
Patient/ family has email to register with CIE and LUSCII
Able to self monitor observations independently or with support from carer/ family

Patient flow



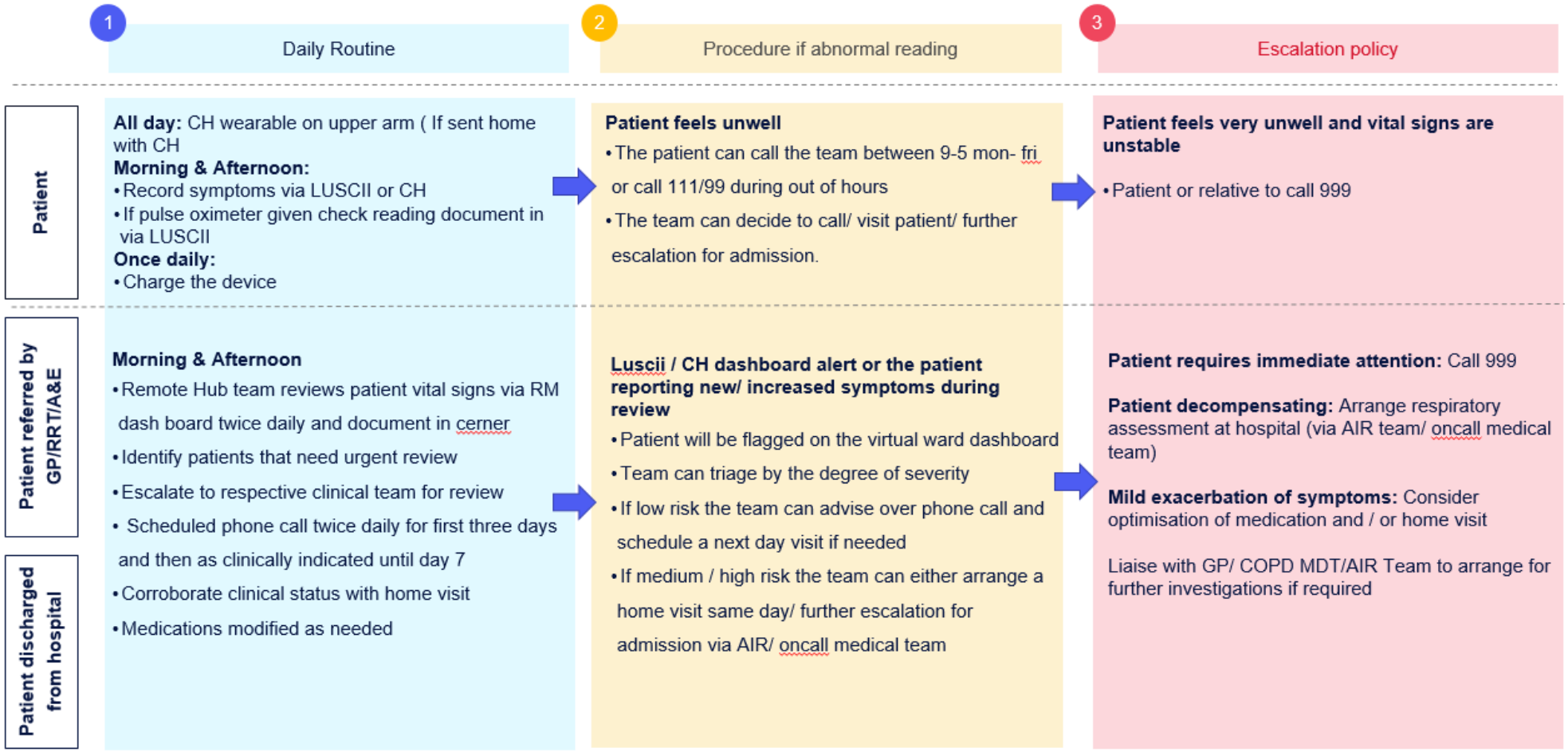
Appendix 6

Tele monitoring pathway

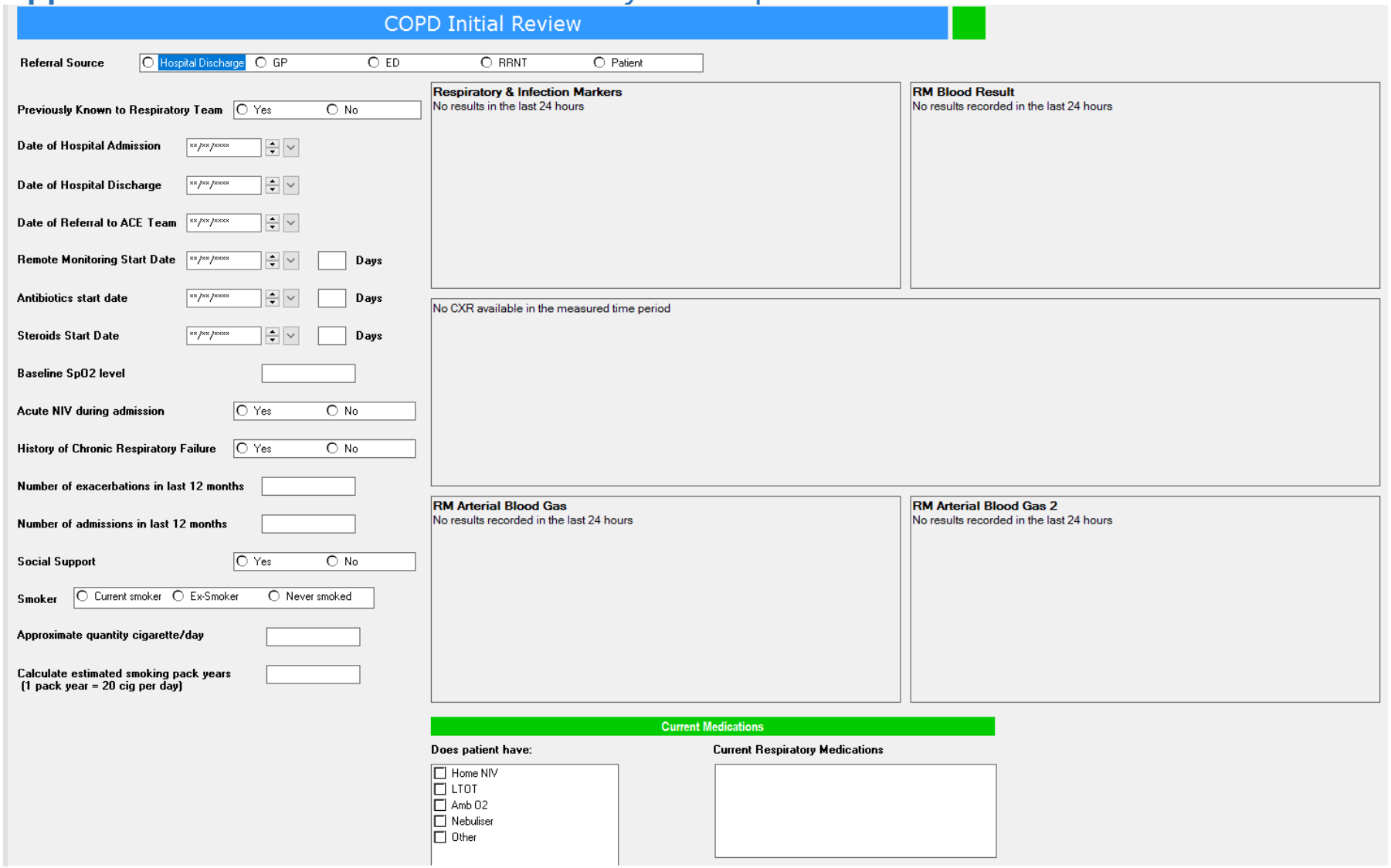


Appendix 7

Daily Vital Sign Monitoring & Escalation



Appendix 8 Remote assessment and daily review power form



Imperial College Healthcare NHS
NHS Trust

COPD Daily Review

Remote Monitoring Observations

SpO2 at rest on air %

SPO2 on exertion on air %

RM Target O2 saturation

RM Oxygen requirement
- Room air
- Oxygen

RM Systolic Blood Pressure mmHg

RM Diastolic Blood Pressure mmHg

RM Respiratory Rate br/min

RM Pulse Rate bpm

RM Temperature degrees C

RM Conciousness Level
- Alert
- New confusion
- Responsive to Voice
- Responsive to Pain
- Unresponsive

Remote Monitoring Obs
No results recorded in the last 24 hours

Date of Admission to VW **/**/****

Days on VW

Cough
- 0 - Normal for patient
- 1 - More than usual
- 2 - Excessive for patient

Chest/Pleuritic Pain
- 0 - None
- 1 - Previously present
- 2 - New Presentation

Difficulty with Expectoration
- 0 - Easy (or 0 if none)
- 1 - More than usual
- 2 - Distressing

Chest Tightness
- 0 - None
- 1 - Previously present
- 2 - New Presentation

Volume of Sputum
- 0 - Normal for patient
- 1 - More than usual
- 2 - Excessive for patient

Ankle Oedema
- 0 - None/Normal for patient
- 1 - Slightly increasing for patient
- 2 - Grossly increasing for patient

Sputum Colour
- 0-Clear/White/No change from Normal
- 1-Yellow
- 2-Green

Mobility
- 0 - Normal for patient
- 1 - More breathless on minimal exertion
- 2 - Unable to mobilise

Wheeze
- 0 - None/Normal for patient
- 1 - More than usual
- 2 - Excessive for patient

Feeling Tired or Weak?
- 0 - Normal for patient
- 1 - More than usual
- 2 - Excessive for patient

Nebuliser/Reliever Inhalers
- 0 - Normal use
- 1 - Using more often with effect
- 2 - No effect

Was your sleep disturbed last night?
- 0- Normal/at baseline for patient
- 1 - More than usual
- 2 - Excessive for patient

RM COPD Symptoms
No results recorded in the last 24 hours

RM COPD Symptoms 2
No results recorded in the last 24 hours

Appendix 9

How to use the pulse oximeter (Patient instructions)

A pulse oximeter helps you monitor how fast your heart is beating and the level of oxygen in your blood.

How to use a Pulse Oximeter

1

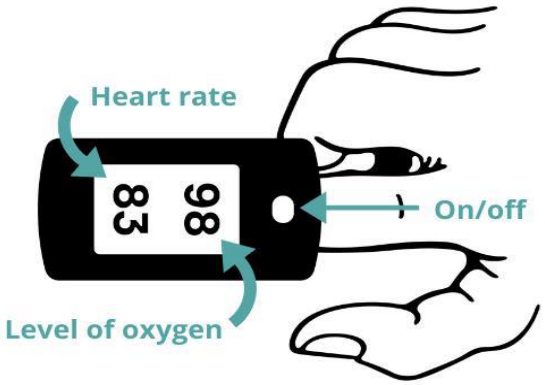
- **PREPARATION**
  - Remove any nail polish or false nails and warm your hand if cold
  - Get a pen and paper ready to write down numbers
  - Make sure you have been resting for at least five minutes before taking your measurement

2

- **USING THE PULSE OXIMETER**
  - Rest your hand on your chest at heart level and hold still
  - Switch the pulse oximeter on and place it on your finger. It works best on your middle or index finger (see diagram on the next page). It should not be used on your ear
  - The reading takes time to steady. Keep the pulse oximeter in place for at least a minute or longer if the reading keeps changing
  - Record the highest result once the reading has not changed for five seconds
  - Write **both** numbers down in the diary - Oxygen level and Heart Rate
  - If you have an issue with using your oxygen monitor, please contact the clinic on the number given above during working hours. If you need assistance outside the hub opening hours, please contact your GP or NHS 111

3

- **RECORDING YOUR RESULTS**
  - Please write your results in the diary. You will need these results to hand when your clinician phones you
  - Your first measurement is your baseline – so record this in the highlighted blue area
  - Then take recordings **three times a day** (or the number agreed by your clinician), at the same time each day. Take extra measurements if you feel there has been a change in your health. Please also record changes in how you are feeling and your breathing
  - See the next page on what to do with the results and whether you need to take any action



What happens next?

A clinician will contact you on a regular basis to find out what your results are.

As long as your oxygen level and breathing are normal, you do not need to contact your GP/NHS 111

What should I do if my readings are below targets change or I feel more unwell?

During working Hours contact the team on the contact number provided and during out of hours please contact 111 or 999

Ring 999 if:

- You are **unable to complete short sentences at rest** due to breathlessness.
- Your **breathing suddenly worsens** within an hour.

OR if these more general signs of serious illness develop:

- you are coughing up blood
- you have blue lips or a blue face
- you feel cold and sweaty with pale or blotchy skin
- you have a rash that does not fade when you roll a glass over it
- you collapse or faint
- you become agitated, confused or very drowsy
- you have stopped peeing or are peeing much less than usual

Ring your GP/NHS 111 as soon as possible if:

- You slowly start feeling **more unwell or more breathless** for two or more hours.
- You are having difficulty breathing when getting up to go to the toilet or similar.
- You sense that something is wrong (general weakness, extreme tiredness, loss of appetite, reduced urine output, unable to care for yourself – simple tasks like washing and dressing or making food).

How to return the Pulse Oximeter

When your clinician tells you that you no longer need the device, please return it to the clinic (see list below) in the bag provided so that it can be safely cleaned and given to other patients. If you are shielding please ask a friend or volunteer to do this for you.

How to use a Pulse Oximeter – videos

English:	English	https://www.youtube.com/watch?v=nx27Ck7xOgo
Polish:	Polski	https://www.youtube.com/watch?v=Lkd-BNeMvLs
Hindi:		https://www.youtube.com/watch?v=e1ipiJY-zwk
Punjabi:		https://www.youtube.com/watch?v=wU5V6wVEHoM
Urdu:		https://www.youtube.com/watch?v=rkGRRLlumW4

Appendix 10 Definitions

Virtual Ward: A virtual ward is a safe and efficient **alternative to NHS bedded care** that is enabled by technology. Virtual wards support patients who would **otherwise be in hospital** to receive the acute care, monitoring and treatment they need in their own home. This includes either **preventing avoidable admissions** into hospital, or **supporting early discharge** out of hospital.

Hospital at Home: Hospital at home is a type of virtual ward. A virtual ward may also require **face-to-face care**, eg to deliver a care assessment or acute level interventions such as IV therapy. The model that blends **in-person care at home with remote oversight and monitoring** is often referred to as a hospital at home

Acute Care: A term describing the hospital level care and treatment people receive when that care is **active but short-term,** and is normally in response to an injury, an episode of illness, an urgent medical condition, or during recovery from surgery. This type of care can be provided in primary, secondary or community care.

Remote monitoring: gathers patient data (e.g. images, symptoms, physiological observations) to give clinicians and patients information that would normally only be obtainable in a face to face assessment, to improve **clinical decision making, provide reassurance and enable the early detection of deterioration**. This may include solutions that are enabled by digital technology e.g. wearable devices

Long-term condition is a health problem that requires **ongoing management over a period of years or decades**. It includes a broad range of medical issues, for example asthma, diabetes and arthritis that can be managed through medication and/or therapy.

Supported self-management

Supported self-management is part of the NHS Long Term Plan's commitment **to make personalised care the norm**. We use the term 'supported self-management' to mean the ways that health and care services encourage, support and empower people to manage their ongoing physical and mental health conditions themselves.

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Associated SOP Documents
COPD Early Supported Discharge Service ICHT 2020
ACE pathway ICHT 2020

Personal Protective Equipment (PPE) for Infection Prevention and Control Policy 2020