NHS London Clinical Networks

Primary Care and Community Respiratory Resource pack for use during COVID-19

Version: 3
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This document will be reviewed and re-released once a fortnight (see release schedule on page 4). Please email england.resp-cnldn@nhs.net to request the most recent version.

Disclaimer: Advice has been based on evidence where available and expert opinion where not available and subject to change as evidence becomes available. Variations to this advice may be required depending on clinical setting and individual patients.

NHS London Clinical Networks

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Version control

Version	Date agreed	Date circulated	Amendments agreed
1	27.3.20	28.3.20	N/A
2	6.4.20	6.4.20	1. Clarified that Roth Scores are not advised for use in the assessment of COVID-19 symptoms. 2. Updated antibiotic prescription advice in line with NICE guidelines. 3. Updated hot and cold site/zoning principles to support implementation. 4. Included a note that consideration should be given to making reasonable adjustments when providing remote services. 5. Aligned pathway diagrams and content to national symptom assessment categories used by 111 services. 6. Included signposting into the national primary care SOPs and emphasised building links with local acute advice and guidance mechanisms. 7. Aligned guidance with BTS guidance where required 8. Emphasised the need to discuss and complete Advance Care Planning and preferred place of care, including additional signposting to CMC resources. 9. Updated PPE guidance as per most recent PHE guidance. 10. Aligned and updated palliative care to new NICE guidelines. 11. Included references to ethical decision making and palliative care resources 12. Provided further clarity and guidance on the supply and provision of oxygen in primary care, community care, on discharge and within nursing/care homes. 13. Enhanced navigation of documents through improving section ordering, naming and numbering. 14. Additional appendix on CMC resources and breathlessness leaflet 15. Inserted an introduction for section 2 to clarify what care settings this respiratory resource pack is provided for. 16. Small changes to spelling, contributors and grammar. 17. Updated links where new/updated guidance available
3	15.4.20	16.4.20	1. Emergency oxygen therapy to treat hypoxic patients with suspected COVID-19 within primary care hot sites 2. New guidance on safety netting for follow up of patients suspected COVID-19 3. Updated guidance on identifying silent hypoxic patients 4. New guidance on safety netting post discharge 5. Alignment to NICE guidelines on ICS and removal of ICS 6. Updates to target saturations admission thresholds, to take into account national and LAS guidance

Upcoming release schedule and expected content

Version	Expected circulation date	Expected updates
4	27.4.20	Review of CPR guidance Updates and alignment relating to treatment preferences Patient discharge leaflet Latest version of questions from ACRX Review follow up on patients with co-morbidities
5	TBC	Paediatric management Oxygen discharge guidance for step down/up and intermediate care settings

1. Introduction

Unprecedented times require an unprecedented response. To mount a co-ordinated response and communicate consistently will require primary care and community staff to work as one team – 111, Integrated Urgent Care, Primary Care (both in and out of hours), Community Respiratory Teams, and a pool of staff responding to the call for extra help. This requires the redesign of the entire community pathway and the establishment of new methods of working.

This guidance has been co-authored at pace (contributors list under section 8). It is anticipated that it will change as knowledge about COVID-19 increases and as the system changes in response over the coming weeks and months. The document will be reviewed and updated as necessary on a weekly basis.

2. Out of Hospital settings, assessments, pathways and treatments for patients with suspected COVID-19

This section provides primary and community care staff guidance on settings, assessment, pathways and appropriate treatment advice for those with suspected COVID-19 symptoms. Out of hospital care settings that have been considered within the scope of this document include Primary Care Hot and Cold sites, patients' homes and nursing/care homes.

2.1. Zoning or Hot and Cold Sites in primary care during COVID-19

There are several models of care provision being implemented across Primary Care estate to reduce the risk of transmission between people requiring face to face assessment and treatment during the COVID 19 pandemic. More information on zoning and hot and cold site are provided within national primary and community SOPs which can be found here: https://www.england.nhs.uk/publication/coronavirus-standard-operating-procedures-for-primary-care-settings/

Until testing is available, we need to assume all people could be COVID-19 positive. In the context of social distancing policy, it is important to reduce the risk to patients and staff from unnecessary exposure to potential sources of COVID-19 infection.

Triage and assessment of patients by default, is to be carried out remotely, by telephone or preferably virtual consultation. "Face to face" assessment should be undertaken in cases where this is imperative to assessment and where the benefit of so doing outweighs any risk. An example could include examination of a patient with suspected acute abdomen. The decision to undertake a face-to-face assessment must be made by 2 or more clinicians, in order to ensure that such assessment is necessary beyond what is possible via a virtual consultation.

Previous viral outbreaks have demonstrated that morbidity and mortality associated with reduced access to care can be of equal, if not greater, significance than the impact of the infection itself.

Where necessary we should continue to examine people physically, (taking the appropriate precautions) particularly where this could inform the diagnosis of other acute conditions or risks of deterioration.

It is recommended that if advice and support mechanisms are available locally from respiratory or acute physicians/palliative care consultants, sites and zones consider building links.

- **Zoning** – this approach **manages both cohorts (high suspicion of COVID-19 and lower suspicion of COVID-19) within all practices but with designated areas and workforce to maintain separation**. This requires designating a specific zone within each practice to manage those with COVID symptoms. This option reduces the need for significant reconfiguration of existing patient flows, acknowledging that flows have already changed to remote consultations. The **interface between the zones requires careful management** to minimise cross contamination with strict decontamination protocols in place.

  Not all premises are likely to have separate entry/exits point to help maintain separation and reduce risk. When seeing patients, physical separation by isolating patient in a specified room with a video/phone link to a healthcare professional in another room, may be possible.

- **Hot & Cold Sites** – Practices may wish to adopt such a model to better manage increasing demand as infection rates increase. In practice, this **means dividing groups of practices into 'hot' sites that manage high suspicion COVID-19 patients only and 'cold sites'** that manage lower suspicion of COVID-19 patients only.

  Cold sites are important to undertake necessary assessment and treatment of lower suspicion of COVID-19 patients, including wound dressings, childhood immunisations etc.

- **Mixed Model** – Each PCN/CCG may have a mixture of the two models.

NB:

- PPE guidance needs to be followed with care in all situations.
- Workforce capacity constraints means pooling of staff may be required.
- We are expecting more national guidance about this very soon.
- Please see appendix 1 for guidelines on emergency oxygen therapy to treat hypoxic patients with suspected COVID 19 within primary care hot sites

2.2. Respiratory assessment and pathways for patients with suspected COVID-19 in the community across all settings

2.2.1. Remote Assessment/Telephone Triage with Patient or Carer

Triage should be carried out by experienced clinicians. See Box 1 below for guidance **and** Appendix 3 for the Oxford COVID19 Evidence Service. It is advised that Roth Scores are not used as part of assessments with patients or carers.

Box 1. Remote Assessment/Telephone Triage with Patient or Carer

1. **Screen for symptoms of COVID-19 infection**
   - Do they have fever **>37.8?**
   - If no thermometer, have they felt shivery, achy, or are they hot to touch?
   - Do they have a new continuous cough, different to usual?

2. **Screen for severity of illness.** Suggested questions:
   - *"How is your breathing is today?"*
   - "*Do you have an oximeter at home or have you noticed any blue discolouration of your lips?"*
   - *"Are you so breathless that you are unable to speak more than a few words?"*
   - *"Are you more breathless than usual on walking or climbing stairs?*
   - "*Do you feel dizzy, faint or have a headache?"*
   - *"When was the last time you went to the toilet and passed urine?"*
   - Ask about other symptoms of severity e.g. collapse, chest pain, signs of sepsis, confusion?

   Please note that patients may be "comfortably hypoxic". When assessing, please check if there has been any deterioration in these question from the day before. There is no accurate way to assess hypoxia without pulse oximetry (unless patient is obviously cyanosed) - so consider how to do this (patient has own device, or deliver device to patient (mobile oximetry service), or patient to attend hot site for assessment and collect oximeter for home monitoring).

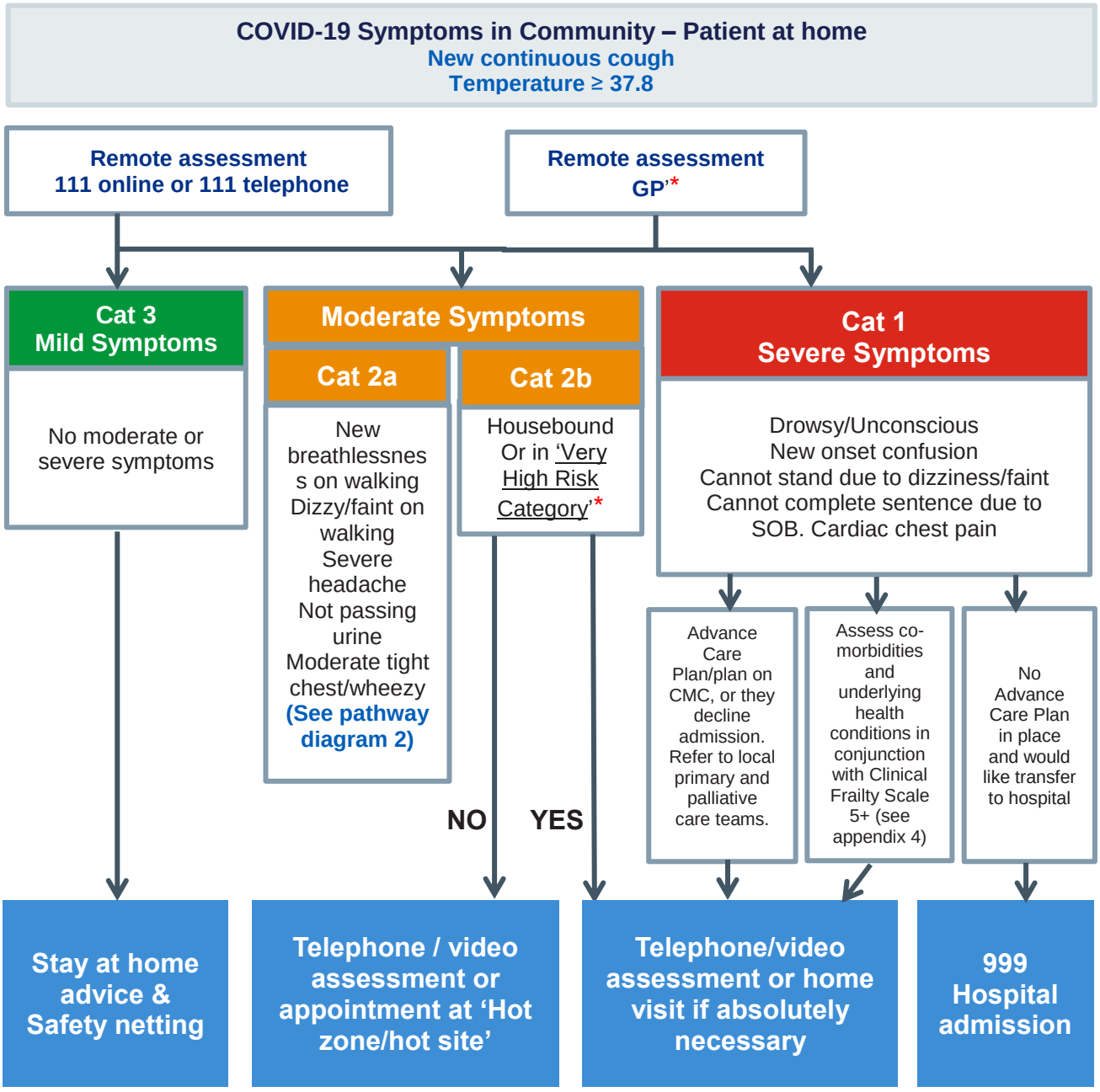
3. **Assess whether increased risk of severe illness** with COVID-19 against the list of conditions which lead to increased risk (see appendix 2)

4. **Do they have an established advance care plan? Is it documented on Co-ordinate My Care? If not, and it is appropriate, explore wishes and consider capacity.**

5. **Decide** whether for home management (see pathway diagram 1 below)

6. **Clinical judgement is crucial and overrides the pathway**

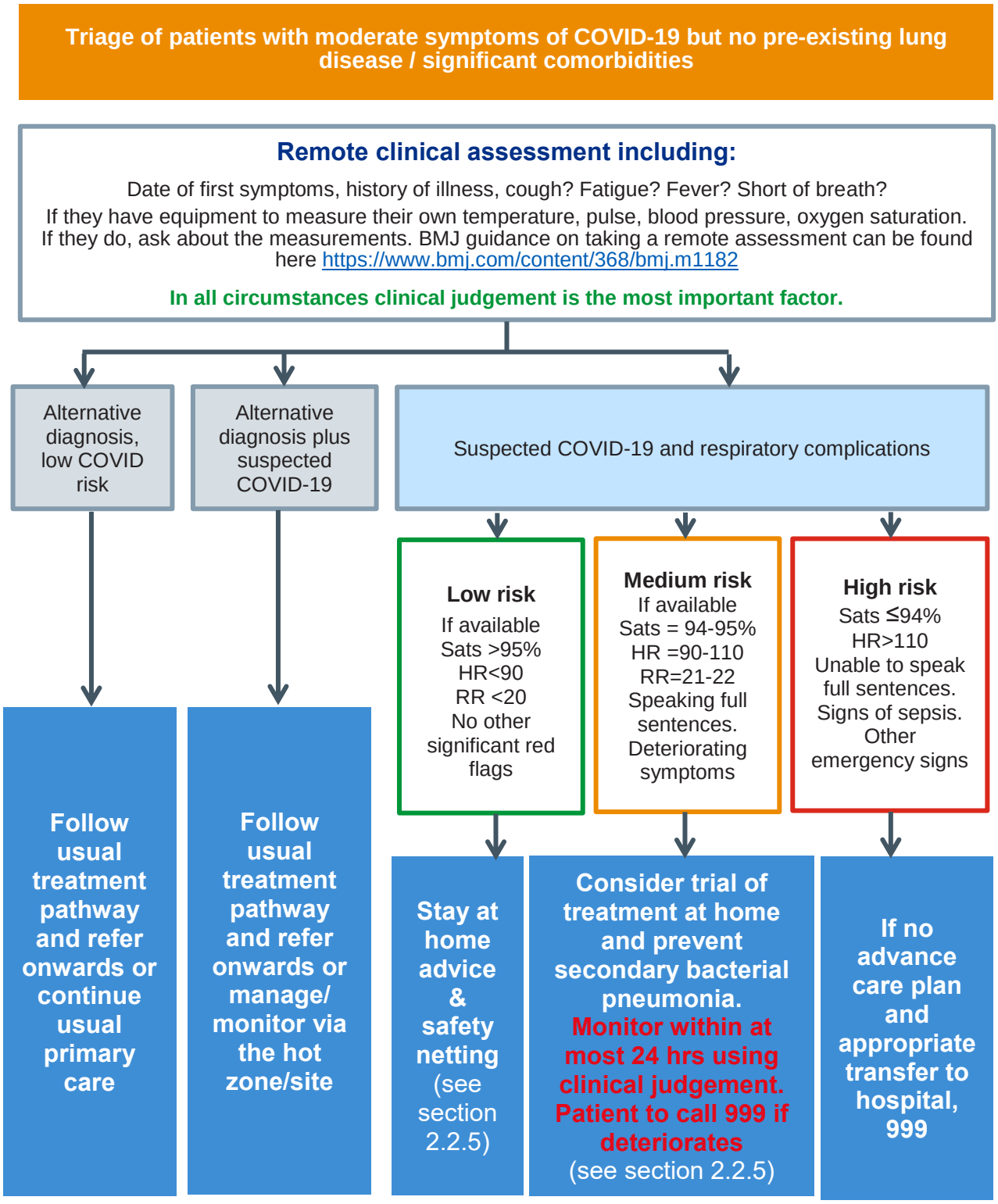
2.2.2. Pathway diagram 1. Categorising patients with COVID-19 symptoms in the Community



* Consideration should be given to making reasonable adjustments with telephone and videoconferencing for people who may find these interactions challenging. These groups may include people with Learning Difficulties, autism, dementia, and those for whom English is not their first language. Where possible it is suggested that interactions are supported by people who know the individual well such as the local Community Learning Disability Service, carers and relatives.

For advice re: mild or moderate symptoms, patients / carers should be directed to the link below: https://www.nhs.uk/conditions/coronavirus-covid-19/. Categories 1 ,2a, 2b and 3 relate to the national categorisation being used by 111 services.

2.2.3. Pathway diagram 2. Triaging patients with moderate symptoms of COVID-19 but NO pre-existing lung disease or significant comorbidities



2.2.4. Pathways for patients with PRE-EXISTING lung conditions or comorbidities

Asthma – COVID-19 can present with symptoms similar to an asthma attack such as cough and shortness of breath. However, it is worth letting patients know that it is uncommon to get a high temperature and changes in taste or smell with an asthma attack so the presence of these symptoms are more likely to suggest infection with SARS-CoV-2.

Most patients with asthma have mild to moderate disease and normal underlying lungs. They should be treated for wheeze or bronchospasm in a conventional manner. If they have a peak flow meter at home they can monitor this themselves. They can be given one for self-monitoring if they have mild/moderate COVID-19 symptoms. The management of asthma exacerbations is unchanged and patients should NOT stop taking their ICS containing inhaler. Patients should be advised to take their medication as guided by their personal asthma action plan including oral corticosteroids and contact their GP surgery to organise a telephone, video or face-to-face consultation. If a course of steroids is clinically indicated (symptoms and signs of bronchospasm/wheeze), it should not be withheld. Antibiotics are only advised if sputum changes colour, thickens or increases in volume.

The physiological parameters from pathway 2 should apply to asthmatic patients as to others when considering admission for COVID-19 symptoms.

https://www.brit-thoracic.org.uk/document-library/quality-improvement/covid-19/bts-advice-for-healthcare-professionals-treating-patients-with-asthma/

COPD – Where a patient with COPD develops increased cough or increased breathlessness in keeping with a previous exacerbation, it should be treated as an exacerbation and they should take their appropriate rescue medication. Oral corticosteroids can also be considered if known concomitant asthma and / or history of eosinophils ≥ 0.3 or known steroid responsiveness. Some patients will seek further discussion with a healthcare professional. Before prescribing steroids, ensure you are advising that the control of symptoms with increased bronchodilation, breathing exercises and pacing, for example and where appropriate. Oral corticosteroids should be avoided in COVID-19 suspected infection (fever or new cough that is different from usual).

Consider admission according to algorithm physiological parameters but if baseline O2 pulse oximetry sats are available:

- Mild deterioration would be defined as up to 2% below their baseline
- Moderate deterioration would be defined as between 3-4% below their baseline
- Severe deterioration would be defined as 5% or more below their baseline

If on Long Term Oxygen Therapy (LTOT) discuss ceiling of care and consider admission if sats <88% on their standard dose of LTOT.

https://www.brit-thoracic.org.uk/document-library/quality-improvement/covid-19/copd-and-covid-19-for-healthcare-professionals/

For additional guidance on Interstitial Lung Disease, Obstructive Sleep Apnoea, Bronchiectasis please see appendix 5.

2.2.5. Safety netting and managing the follow up of patients with a suspected COVID-19 infection who have been advised they can stay at home

Practices and services should maintain a list of known / suspected COVID-19 patients who they have agreed can stay at home. They should be followed up proactively if they had moderate symptoms in case they deteriorate. Use your clinical judgement about how frequently they should be followed up by telephone or video consultation.

Frequency and method of contact with these patients should be recorded. This list should be reviewed at least daily, highlighting through buddying and/or huddles where difficult decisions might have been made. In your thinking about the patient and their current health and history, keep in mind what would be the most appropriate pathway.

Box 2. safety netting guidance for GP monitoring of Category 2a/2b patients:

- **Low risk -** General advice and call NHS 111 if symptoms deteriorate
- **Medium risk -** Follow up with daily phone call via hot sites or GP – assess change in level of breathless at rest and with usual activity. Daily pulse oximetry (either supply patient with pulse oximeter or set up Mobile pulse oximetry service ensuring decontamination between patients). Refer to secondary care with deteriorating saturations. Discharge from follow up if symptoms improving and oxygen saturations stable or improving over 48 hours and treat as low risk

Consider a holistic assessment of the patient, including consideration of CFS/ co-morbidities in order to determine the most appropriate pathway. Is a conversation about end of life care planning appropriate? Should the palliative care team be involved? We appreciate these conversations would usually happen face to face. These conversations will need to take place over the phone or in video consultation as will any psychological support. We recommend having regular team meeting/buddy conversations to support you in these challenges.

As a reminder: the consultation should be by telephone or video in the first instance. If an ambulance is required, the clinician should call 999 and handover and include COVID-19 status. **A home visit should only be done if it is agreed by at least 2 clinicians.** If a home visit has been agreed minimise the time of exposure to the patient. Therefore, take the history remotely and discuss planning of next steps remotely with the patient. Only the examination is to be done face to face. Please see section on home visits under 2.2.6. for further information on home visits and face to face contact.

2.2.6. Home visits and face to face contact (including admission avoidance)

Box 3. Management of home visit / face to face contact in suspected COVID-19 +ve patients

- Only visit at home if there is no remote alternative. Discuss need to visit with senior colleague/peer. Consider what information will be gained from it that cannot be ascertained remotely and how this will change the outcome
- Review PPE guidance daily and adhere to the recommendations
- Ask the patient to wear a mask during the consultation to protect them and the case worker- Suggest passing mask through letterbox to patient prior to entry
- Minimise physical contact with the patient and carer and keep 2m distance if possible
- Do not perform for chest physiotherapy, spirometry, PEFR, CO monitoring or FeNO or any other aerosol generating procedure
- Sputum samples for management of bronchiectasis should be discussed with specialist
- Viral swabs should not be collected
- Monitor patients using SpO2, RR, HR (and BP if required)
- Discuss advance care plans and wishes if appropriate and seek consent to urgently document on Coordinate My Care (CMC).
- Escalate by calling 999 if required and appropriate according to treatment escalation plans/advance care plan. Otherwise, make a plan for future monitoring e.g. telephone / video or face to face
- Dispose of all PPE at visit end according to national guidance

2.3. PPE Requirements

For guidance on the latest advice for the use of PPE or where to get it please see:

https://www.england.nhs.uk/coronavirus/publication/guidance-supply-use-of-ppe/

The following poster also provides current national recommendations for use in different care settings.

Public Health England | Academy of Medical Royal Colleges | GIG CYMRU NHS Wales – Iechyd Cyhoeddus Cymru Public Health Wales | Health Protection Scotland | HSC Public Health Agency | NHS

Recommended PPE for primary, outpatient and community care by setting, NHS and independent sector

Setting	Context	Disposable Gloves	Disposable Plastic Apron	Disposable fluid-repellent coverall/gown	Surgical mask	Fluid-resistant (Type IIR) surgical mask	Filtering face piece respirator	Eye/face protection[1]
Any setting	Performing an aerosol generating procedure[2] on a possible or confirmed case(s)[3]	✓ single use[4]	✗	✓ single use[4]	✗	✗	✓ single use[4]	✓ single use[4]
Primary care, ambulatory care, and other non emergency outpatient and other clinical settings e.g. optometry, dental, maternity, mental health	Direct patient care – possible or confirmed case(s)[3] (within 2 metres)	✓ single use[4]	✓ single use[4]	✗	✗	✓ single or sessional use[4,5]	✗	✓ single or sessional use[4,5]
	Working in reception/communal area with possible or confirmed case(s)[3] and unable to maintain 2 metres social distance[6]	✗	✗	✗	✗	✓ sessional use[5]	✗	✗
Individuals own home (current place of residence)	Direct care to any member of the household where any member of the household is a possible or confirmed case[7]	✓ single use[4]	✓ single use[4]	✗	✗	✓ single or sessional use[4,5]	✗	✓ risk assess single or sessional use[4,5,8]
	Direct care or visit to any individuals in the extremely vulnerable group or where a member of the household is within the extremely vulnerable group undergoing shielding[9]	✓ single use[4]	✓ single use[4]	✗	✓ single use[4]	✗	✗	✗
	Home birth where any member of the household is a suspected or confirmed case[3,7]	✓ single use[4]	✓ single use[4]	✓ single use[4]	✗	✓ single or sessional use[4,5]	✗	✓ single or sessional use[4,5]
Community-care home, mental health inpatients and other overnight care facilities e.g. learning disability, hospices, prison healthcare	Facility with possible or confirmed case(s)[3] – and direct resident care (within 2 metres)	✓ single use[4]	✓ single use[4]	✗	✗	✓ single or sessional use[4,5]	✗	risk assess sessional use[4,5]
Any setting	Collection of nasopharyngeal swab(s)	✓ single use[4]	✓ single or sessional use[4,5]	✗	✗	✓ single or sessional use[4,5]	✗	✓ single or sessional use[4,5]

Table 2

1. This may be single or reusable face/eye protection/full face visor or goggles.
2. The full list of aerosol generating procedures (AGPs) is within the IPC guidance [note APGs are undergoing a further review at present].
3. A case is any individual meeting case definition for a possible or confirmed case: https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-of-possible-cases/investigation-and-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wn-cov-infection
4. Single use refers to disposal of PPE or decontamination of reusable items e.g. eye protection or respirator, after each patient and/or following completion of a procedure, task, or session; dispose or decontaminate reusable items after each patient contact as per Standard Infection Control Precautions (SICPs).
5. A single session refers to a period of time where a health care worker is undertaking duties in a specific care setting/exposure environment e.g. on a ward round; providing ongoing care for inpatients. A session ends when the health care worker leaves the care setting/exposure environment. Sessional use should always be risk assessed and considered where there are high rates of hospital cases. PPE should be disposed of after each session or earlier if damaged, soiled, or uncomfortable.
6. Non clinical staff should maintain 2m social distancing, through marking out a controlled distance; sessional use should always be risk assessed and considered where there are high rates of community cases.
8. Risk assessed use refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets of blood or body fluids.
7. Initial risk assessment should take place by phone prior to entering the premises or at 2 metres social distance on entering; where the health or social care worker assesses that an individual is symptomatic with suspected/confirmed cases appropriate PPE should be put on prior to providing care.
8. Risk assessed use refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets or blood or body fluids.
9. For explanation of shielding and definition of extremely vulnerable groups see guidance: https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19

Aerosol generating procedures (AGP's) should not be performed during any home visits as aerosols generated by medical procedures are one route for the transmission of the COVID-19 virus. The following procedures are considered to be potentially infectious AGPs:

- Intubation, extubation and related procedures;
- Tracheotomy/tracheostomy procedures;
- Manual ventilation;
- Open suctioning;
- Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure ventilation (CPAP)

Certain other procedures/equipment may generate an aerosol from material other than patient secretions but are not considered to represent a significant infectious risk. Procedures in this category include:

- Administration of pressurised humidified oxygen;
- Administration of medication via nebulisation.

During nebulisation the aerosol is created from the liquid medication in the medication chamber and does not carry patient derived viral particles. If a particle in the aerosol coalesces with contaminated mucous, it will be too dense to become airborne and therefore will not be part of the aerosol. Advice from PHE and HPS is that nebulisation is NOT considered to be a 'viral' aerosol generating procedure (https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19-personal-protective-equipment-ppe)

However, this information may change and we would still recommend caution and use standard PPE (fluid resistant mask, eye protection, apron and gloves) if a nebuliser is used. Alternatively, large doses of bronchodilator can be delivered with a large volume spacer (4 - 10 puffs salbutamol). Staff should use appropriate hand hygiene when helping patients to remove nebulisers and oxygen masks.

2.4. Cardiopulmonary Resuscitation

Please refer to any established records of resuscitation decisions that may be present in home or recorded on other systems including Coordinate My Care. **We advise that as in all basic life support situations, the clinician carries out a risk assessment first**. The government's guidance for first responders states (https://www.gov.uk/government/publications/novel-coronavirus-2019-ncov-interim-guidance-for-first-responders/interim-guidance-for-first-responders-and-others-in-close-contact-with-symptomatic-people-with-potential-2019-ncov):

*"If you are required to perform cardiopulmonary resuscitation (CPR), you should conduct a **risk assessment** (in the Police this would be a "dynamic risk assessment") and **adopt appropriate precautions for infection control**. Where possible, it is recommended that you do not perform rescue breaths or mouth-to-mouth ventilation; perform chest compressions only."*

Chest compressions and defibrillation (as part of resuscitation) are not considered AGPs; first responders can commence chest compressions and defibrillation without the need for AGP PPE while awaiting the arrival of other personnel who will undertake airway manoeuvres. On arrival of the team, the first responders should leave the scene before any airway procedures are carried out and only return if needed and if wearing AGP PPE.

2.5. Treatments considered appropriate to specific care settings

In an out of hospital setting, treatment options should always be considered in the context of any established Advance Care Plan (ACP).

Not all patients will benefit from hospital admission particularly those with life limiting co-morbidities and/or severe chronic illness and transfer for admission may even go against their previously recorded preferences. When possible, discuss the risks, benefits and possible likely outcomes of the treatment options with patients with COVID-19, and their families and carers, so that they can express their preferences about their treatment and escalation plans. (NICE COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community NICE guideline [NG163] 3.4.2020)

In London some patients have provided consent to create a Co-ordinate My Care (CMC) record with their treating or palliative care teams. It is essential to look for these to see if a record has been created. It may contain essential information which can aid decision making.

CMC records may contain:

- Information about their medical history
- Contact information of their next of kin or those with Lasting Powers of Attorney
- Professionals who are involved in their care
- Records of their wishes and preferences regarding place of care
- Established Treatment Escalation Plans and cardiopulmonary resuscitation decisions
- Record of any Advance Decisions to Refuse Treatment (ADRT)
- Symptom control guidance

Resource information to assist clinicians to create and update CMC records is referenced in Appendix 6. Training resources are available at the link below. These includes a five minute video overview.

https://www.coordinatemycare.co.uk/for-healthcare-professionals/training/

There is however also an acknowledgement that some decisions are going to be complex and clinicians may find the guidance released from the BMA and the RCP helpful:

https://www.bma.org.uk/media/2226/bma-covid-19-ethics-guidance.pdf

https://www.rcplondon.ac.uk/news/ethical-guidance-published-frontline-staff-dealing-pandemic

https://elearning.rcgp.org.uk/pluginfile.php/149288/mod_resource/content/2/COVID%20EOLC%20Community%20Charter_Final.pdf

2.5.1. Discussing Advance Care Planning and preferred place of care – supporting patients and their families

If there are no existing or recorded advance care plans, opening discussions to ascertain any preferences or wishes is encouraged if sensitively approached to avoid inappropriate escalation of treatment/transfer of care to hospital. This should be done by a competent and experienced health care professional. These should be documented and shared urgently via CMC so it can be accessed by those in urgent and emergency care.

The following joint statement on Advance Care Planning has be provided by the BMA, CPC, CQC and RCGP (30.3.2020).

Joint statement on advance care planning

The importance of having a personalised care plan in place, especially for older people, people who are frail or have other serious conditions has never been more important than it is now during the Covid 19 Pandemic.

Where a person has capacity, as defined by the Mental Capacity Act, this advance care plan should always be discussed with them directly. Where a person lacks the capacity to engage with this process then it is reasonable to produce such a plan following best interest guidelines with the involvement of family members or other appropriate individuals.

Such advance care plans may result in the consideration and completion of a Do Not Attempt Resuscitation (DNAR) or ReSPECT form. It remains essential that these decisions are made on an individual basis. The General Practitioner continues to have a central role in the consideration, completion and signing of DNAR forms for people in community settings.

It is unacceptable for advance care plans, with or without DNAR form completion to be applied to groups of people of any description. These decisions must continue to be made on an individual basis according to need.

This is a joint statement from the following organisations:

British Medical Association (BMA)
Care Provider Alliance (CPA)
Care Quality Commission (CQC)
Royal College of General Practice (RCGP)

2.5.2. Treatments to consider at home or nursing/care home

- Antibiotics for prevention of secondary bacterial pneumonia (Doxycycline 200mg day 1 then 100mg for 4 days or alternatively Amoxicillin 500mg tds for 5 days). Do not routinely use dual antibiotics. https://www.nice.org.uk/guidance/ng165/chapter/4-Managing-suspected-or-confirmed-pneumonia
- Prednisolone for exacerbation of asthma (not responding to escalation of inhaled therapies) but not for COPD unless known concomitant asthma, history of raised eosinophils ≥ 0.3 or known steroid responsiveness.
- High dose bronchodilators (4-8 puffs salbutamol via large volume spacer) at home or nebuliser if patient already has one. The purchasing or loaning of nebulisers should be

discouraged unless patients are already under the care of a Community Respiratory Team for underlying lung disease. (see page 8 for these cohorts)

- There is no current recommended home oxygen pathway for supporting unselected patients with COVID-19 with oxygen therapy at home. At the time of writing, the initiation of oxygen therapy to treat hypoxaemia in patient's homes, care homes or nursing homes is not recommended, Please see palliative care section of this document for symptom control guidance where patient preference is not to be transferred to hospital setting for treatment of COVID 19.
- To ensure effective risk management around oxygen initiation, supply and ongoing assessment in out of hospital settings, the need for oxygen provision must first be discussed with appropriately experienced clinicians. E.g. Acute or community Respiratory teams.

  Local areas can also liaise with their local Home Oxygen Supply Assessment and Review Service (HOSAR) in the first instance, or in discussion with on-call palliative care teams outside normal working hours.

2.6. Post-discharge

The circumstances of each discharge will vary but it is expected that patients may have residual symptoms of breathlessness and potentially hypoxaemia on discharge. They should receive telephone or video follow-up from primary care or specialist community respiratory service if available according to local arrangements.

https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/covid-19-discharge-guidance-hmg-format-v4-18.pdf

If patients require review post discharge from secondary care, this should be done remotely and treated as a potential COVID-19+ve patient according to the algorithms. Patients may continue to shed virus following discharge. Current evidence recommends 14 days of isolation post first symptom or swab. Therefore we recommend that patients should be treated as infectious within this time frame and PPE guidance followed.

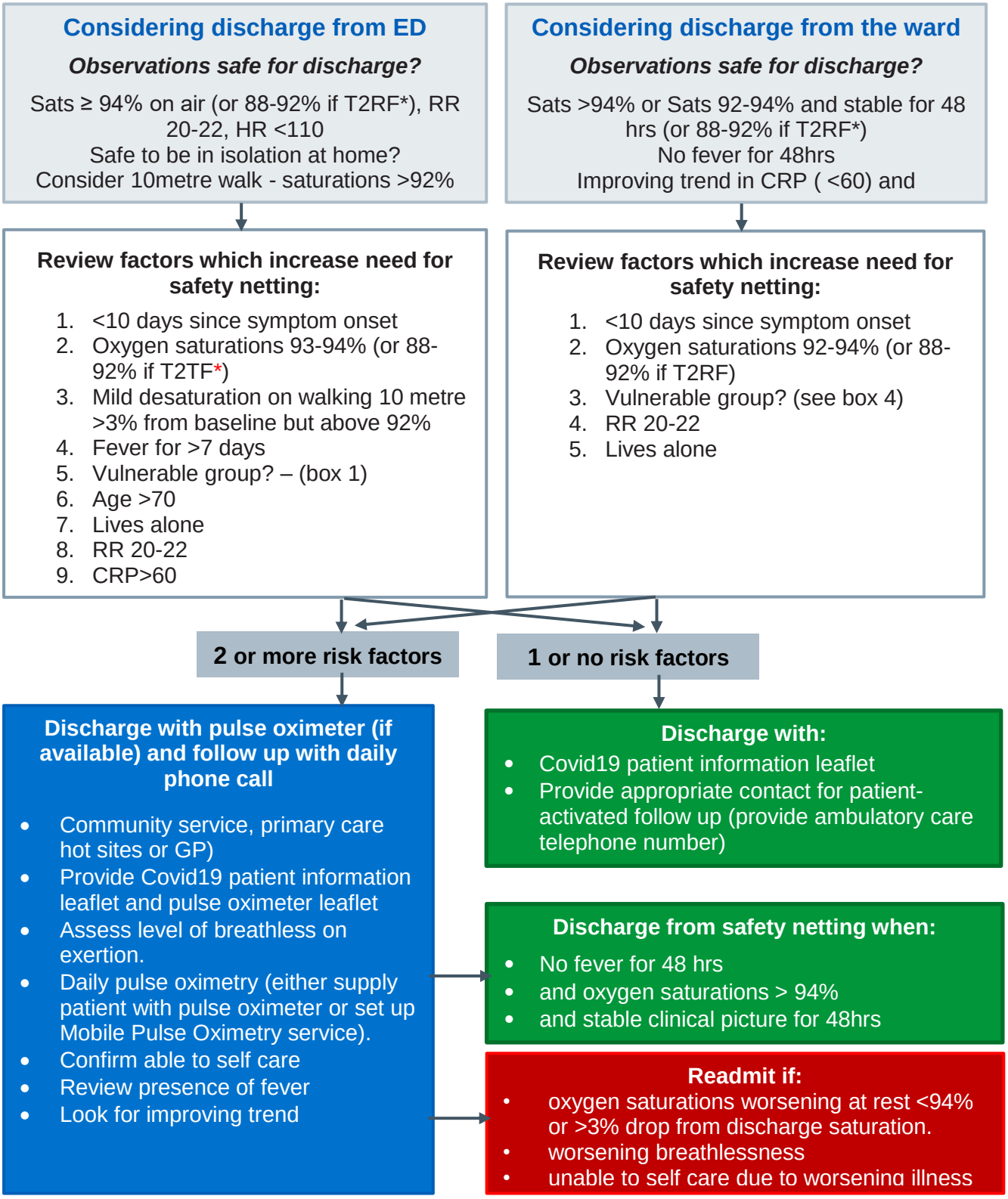
At the time of writing, patients referred for hospital assessment and admission as part of their treatment escalation plan for COVID-19 and respiratory failure remain in hospital until their hypoxia improves and they return to their baseline target oxygen saturations without an ongoing oxygen requirement.

Therefore oxygen therapy should not be required for patients discharged form hospital and usual guidelines for home oxygen therapy and discharge should be followed. This will be kept under review as the impact of the coronavirus epidemic on acute and community services evolves.

Patients with COVID-19 complicating COPD or another long term respiratory disease may be considered for hospital discharge with oxygen, if clinically appropriate, as part of a supported discharge pathway in which case BTS Home Oxygen and NICE COPD guidance should be followed. An appropriately trained clinician must be involved where oxygen therapy is to be considered on discharge to ensure appropriate follow up and monitoring outside of hospital is available outside the hospital setting.

2.6.1. COVID-19 guidance on safety netting post-discharge from hospital for different care settings

2.6.1.1. Clinical decision aid: Suitability for discharge and appropriate safety netting following ED attendance or hospital admission with confirmed/ suspected Covid19 (use for patients who would be for readmission and full escalation of care)



*T2RF: Type 2 respiratory failure is typically seen in patients with severe COPD and is associated with hypercapnia on ABG (pCO2 >6.1kPa). In chronic T2RF there will be a raised serum HCO3 as part of metabolic compensation to maintain a normal serum pH. These patients are vulnerable to rising pCO2 and respiratory acidosis if over oxygenated >92% hence target sats are 88-92% in this group.

Box 4. "Extremely Vulnerable Patient Group" relating to the Covid19 pandemic https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19

1. Solid organ transplant recipients.
2. People with specific cancers:
   - people with cancer who are undergoing active chemotherapy
   - people with lung cancer who are undergoing radical radiotherapy
   - people with cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment
   - people having immunotherapy or other continuing antibody treatments for cancer
   - people having other targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or PARP inhibitors
   - people who have had bone marrow or stem cell transplants in the last 6 months, or who are still taking immunosuppression drugs
3. People with severe respiratory conditions including all cystic fibrosis, severe asthma and severe COPD.
4. People with rare diseases and inborn errors of metabolism that significantly increase the risk of infections (such as SCID, homozygous sickle cell).
5. People on immunosuppression therapies sufficient to significantly increase risk of infection.
6. Women who are pregnant with significant heart disease, congenital or acquired.

2.6.1.2. Discharge to care/nursing home following COVID illness

Follow current NHS/PHE guidance:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/874213/COVID-19_hospital_discharge_service_requirements.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/874213/COVID-19_hospital_discharge_service_requirements.pdf

3. Emerging guidance in the use of oxygen therapy in COVID-19 outside of hospital setting

At the time of writing, advice and guidance on the safe and effective use, and supply, of oxygen therapy in settings outside of hospital is emerging and requires further exploration before more definitive guidance can be issued. There are potentially three cohorts of patients in particular care settings being considered for oxygen therapy. These are listed below with emerging recommendations for each.

3.1 Patients discharged from emergency departments and/or hospital wards (non-palliative)

Patients referred for hospital assessment and admission as part of their treatment escalation plan for COVID-19 and respiratory failure should remain in hospital until their hypoxia improves and they return to their baseline target oxygen saturations without an ongoing oxygen requirement. Therefore, oxygen therapy should not be required for patients discharged from hospital and usual guidelines for home oxygen therapy and discharge should be followed. This will be kept under review as the impact of the coronavirus epidemic on acute and community services evolves.

Patients with COVID-19 and COPD or another long-term respiratory disease may be considered for hospital discharge with oxygen, if clinically appropriate, as part of a supported discharge pathway in which case BTS Home Oxygen and NICE COPD guidance should be followed. An appropriately trained clinician must be involved where oxygen therapy is to be considered on discharge to ensure appropriate follow up and monitoring outside of hospital is available outside the hospital setting.

3.2 Patients whose preferred place for treatment for COVID-19 is within their home, or nursing home

There is no current recommended home oxygen pathway for supporting unselected patients with COVID-19 with oxygen therapy within their home, or within nursing/care home settings. At the time of writing, the initiation of oxygen therapy to treat hypoxaemia in patient's homes, care homes or nursing homes is not recommended, Please see palliative care section of this document for symptom control guidance where patient preference is not to be transferred to hospital setting for treatment of COVID-19.

To ensure effective risk management around oxygen initiation, supply and ongoing assessment in out of hospital settings, the need for oxygen provision must first be discussed with appropriately experienced clinicians. e.g. Acute or community Respiratory teams.

Local areas can also liaise with their local Home Oxygen Supply Assessment and Review Service (HOSAR) in the first instance, or in discussion with on-call palliative care teams outside normal working hours.

4. Palliative Care

Some patients may already be known to local Specialist Palliative Care services and support for ongoing management may be available including access to telephone advice.

The continuation of regular palliative care multidisciplinary team (MDT) meetings within GP practices is encouraged to support decision making and provide specialist advice.

4.1. Care in the home (including nursing and care home settings)

For patients who have severe symptoms and are deteriorating rapidly, consider urgent referral to primary care and local specialist palliative care services, with appropriate consent. This will include patients with a high symptom burden, those with an established wish to be cared for at home at end of life, and those who have capacity with life limiting illness and decide to remain at home in the current situation. It may also include patients that are considered to be actively dying and do not have capacity, and for whom transfer to hospital is considered not be in their best interest by the professionals involved.

4.2. Non-pharmacological control of symptoms

Breathlessness, anxiety, delirium, cough and fever have all been reported as a result of COVID-19. A number of non-pharmacological treatments exist which, can be used in any patient reporting distress from these symptoms, but which may be particularly important in palliation.

4.2.1. Breathlessness (see NICE COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community NICE guideline [NG163] 3.4.2020)

Be aware that severe breathlessness often causes anxiety, which can then increase breathlessness further.

As part of supportive care the following may help to manage breathlessness:

- keep the room cool
- relaxation and breathing techniques and changing body positioning
- encouraging patients who are self-isolating alone, to improve air circulation by opening a window or door (**do not use a fan** because this can spread infection)

Local services may have created their own breathlessness guidance for non-pharmacological management at home, otherwise the NIHR Applied Research Collaborative Palliative and End of Life Theme have created the attached leaflet (appendix 7).

4.3. Pharmacological control of symptoms

Use local symptom control guidelines and advice from local Palliative Care teams to guide the use of medication to control symptoms. Recommendations may change over time due to availability of medications and equipment.

On 3.4.2020 NICE published COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community NICE guideline [NG163] 3.4.2020)

The RCGP have a variety of resources including clinical guidelines for the community setting:

https://elearning.rcgp.org.uk/pluginfile.php/149342/mod_resource/content/1/COVID%20Community%20symptom%20control%20and%20end%20of%20life%20care%20for%20General%20Practice%20FINAL.PDF

Please note that patients with severe symptoms of Covid-19 may rapidly deteriorate and anticipatory prescribing is therefore advised for those in the last hours to days of life or where there may be an anticipated deterioration for those to be cared for at home. Consider the following symptoms and prescribe appropriate medications (adapted from Association for Palliative Medicine COVID-19 guidelines (22 March 2020 and NICE guidance 3 April 2020:

Symptom	Clinical scenario	Recommendation
Breathlessness (at rest or minimal exertion) **See NICE for special considerations including renal impairment.**	Opioid naïve (i.e. no previous opioids) and able to swallow	Morphine sulfate immediate release 2.5mg to 5mg PO 2 to 4hrly as required Morphine sulfate modified release 5mg bd, increased as necessary (titrate up to maximum 30mg daily)
	Patients who are on regular opioids for pain relief	Morphine sulfate immediate release 5mg to10mg PO 2 to 4hrly as required, or one twelfth of the 24hr dose for pain, whichever is greater
	Patients who are unable to swallow	Morphine sulfate 1mg to 2mg subcutaneously 2 to 4hrly as required. If on regular opioids for pain or if needed regularly (more than twice a day), consider a continuous infusion via syringe pump starting with Morphine Sulfate 10mg over 24 hours.
Anxiety	Patients who are able to swallow	Lorazepam 0.5mg to 1mg 4 sublingual (oral tablet can be used off label) 6hrly PRN, Maximum 4 mg in 24 hrs. Reduce to 0.25mg-0.5mg in elderly or debilitated patients (max 2mg in 24 hours)

Anxiety	Patients who are unable to swallow	Midazolam 2.5mg to5mg subcutaneously 2 to 4hrly PRN If needed regularly (more than twice daily), consider a continuous infusion via syringe pump starting with Midazolam 10mg over 24 hours.
Delirium	Patients who are able to swallow	Haloperidol tablets 0.5mg to 1mg at night and every 2 hours when required. Start at higher dose of 1.5mg to 3mg if the patient is severely distressed or risk identified. Can be increased by 0.5 mg to 1mg increments as required (maximum 10mg daily or 5mg in elderly) Can be given at the same does subcutaneously or by 24 hour infusion such as 2.5mg to 10mg over 24 hurs. Consider adding a benzodiazepine such as lorazepam or midazolam if the patient remains agitated.
	Patients who are unable to swallow	Levomepromazine 12.5mg to 25mg subcutaneously as a starting dose and then hourly as required (use 6.25mg to 12.5mg in the elderly). Maintain with subcutaneous infusion of 50mg to 200mg over 24 hours according to response (please note doses of over 100mg over 24 hours should be given under specialist supervision) Consider use of Midazolam alone or in combination if the patient has anxiety or breathlessness.
Cough	Patients who are able to swallow	Simple linctus 5mg to10mg PO QDS If ineffective: Codeine linctus 15mg to 30mg 4hrly as required up to QDS, which can be increased to 30mg to 60mg PO QDS (max 240mg in 24 hours) Or 2nd line Morphine Sulfate immediate release solution 2.5mg to 5mg PO 4Hrly
Fever	N/A	Paracetamol 500mg to 1g PO QDS NB: NSAIDs are contraindicated

N.B. Sedation and opioid use should not be withheld because of an inappropriate fear of causing respiratory depression.

For patients in their last days and hours of life for managing breathlessness:

Treatment	Dosage
Opioid	Morphine sulfate 10 mg over 24 hours via a syringe driver, increasing stepwise to morphine sulfate 30 mg over 24 hours as required
Benzodiazepine if required in addition to the opioid	Midazolam 10 mg over 24 hours via the syringe driver, increasing stepwise to midazolam 60 mg over 24 hours as required
Add parenteral morphine or midazolam if required	Morphine sulfate 2.5 mg to 5 mg subcutaneously as required Midazolam 2.5 mg subcutaneously as required

See further Special considerations NICE Guidance **NG163**

5. Business as Usual for Non-COVID-19 Respiratory Patients or Smokers

There are a number of tasks which should be performed to reduce the risk from COVID-19 in this group. They are:

- Identify the respiratory patient cohort at risk
- Provide them with the local respiratory advice line number
- Reinforce government guidance on social shielding for at least 12 weeks, see links. British Lung Foundation - https://www.blf.org.uk/support-for-you/coronavirus/what-is-social-shielding and Asthma UK - https://www.asthma.org.uk/advice/triggers/coronavirus-covid-19/
- If they have no support at home, ensure they have registered on the government's extremely vulnerable list or register for them https://www.gov.uk/coronavirus-extremely-vulnerable
- Ensure they have sufficient medications and that they can be delivered to their homes as required
- For COPD patients, unless contraindicated, prescribe a rescue pack and ensure it is delivered to them at home
- Advise them to get a home thermometer and pulse oximeter if possible (or issue them if you have access to stock)
- Avoid use of prednisolone for AECOPD unless severe wheeze/concomitant asthma or eosinophilia on FBC previously >=0.3. Use antibiotics as per current guidance.
- Ensure they have an advance care plan and offer to record this on CMC. If one is not in place, offer to explore their wishes.
- Currently most Pulmonary Rehabilitation Services are suspended, services maybe supporting patients to exercise at home. Please refer patients as usual to your local PR service for support. Patients can also be directed to https://www.blf.org.uk/support-for-you/coronavirus for information on how to remain active.
- Tell patients established on ICS to continue to use them, and delay any planned trials of withdrawal of ICS

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7. Acknowledgements

The pathway diagrams are based on those drawn up by Knowsley Community Team.
The home visit guidance is based on a draft document from NCL.
The palliative care guidance is based on King's College Hospital guidance.

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Appendix 1. Guideline on emergency oxygen therapy to treat hypoxic patients with suspected COVID 19 within primary care hot sites v1 (7 Apr 2020)

Purpose of this document: this guide was produced for health care professionals working in hot sites with guidance on the use of emergency oxygen therapy to treat patients with hypoxaemia associated with suspected or confirmed COVID 19. It has been developed using the British Thoracic Society guidelines for Emergency Oxygen[1] and expert clinical consensus across London.

Indications for emergency oxygen therapy in patients without underlying lung disease

It is recommended that emergency oxygen must only be used to maintain target saturations in patients who have been assessed face to face and **are waiting for transfer to hospital.**

At the time of writing, specific clinical indications are:

1) Patients who are breathless and have oxygen saturations (presuming no underlying lung disease) **<94%**
2) Patients who are not breathless (silent hypoxaemia) and have oxygen saturations **<92%**

Signs of respiratory deterioration:

- ↑ Respiratory rate (especially if >25 per minute)
- ↓ Oxygen saturations by pulse oximetry
- ↑ Oxygen dose needed to maintain target sats (see algorithm below)

Signs of CO_2 retention are:

- Drowsiness
- Headache
- Flushed face
- Flapping Tremor

Assessment and monitoring

- Pulse oximetry and staff appropriately trained in its use must be available in all locations where emergency oxygen is being used
- Continuous monitoring and close observation of the patient whilst using oxygen therapy is advised
- The oxygen saturation should be monitored continuously until the ambulance arrives and receives handover

Recommended supply:

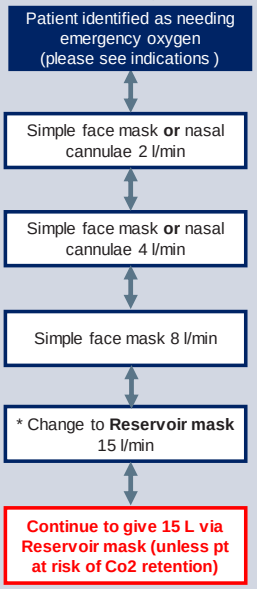
Emergency oxygen should be available in primary care sites, preferably using oxygen cylinders fitted with high-flow regulators (delivering over 6 L/min) must be used.

Recommended disposables:

It is recommended that the following delivery devices should be available:
1. High concentration reservoir mask (non-rebreathe mask) for high-dose oxygen therapy

2. Nasal cannulae (preferably) or simple face mask for medium dose oxygen therapy

Emergency oxygen treatment algorithm



Training on set up: This guide does not replace the training provided by Air Liquide on delivery of site-specific oxygen supply.

It is recommended that each site nominate 1-2 oxygen leads to support safe and effective use within primary care sites.

The key aim/s: to maintain target sats at **94-96% until the ambulance arrives.**

- The oxygen flow should be **adjusted upwards or downwards to maintain a saturation of 94%** for most patients (apart from those who m ay be more at risk of CO_2 retention (see above for signs).
- Target saturations for people **with COPD at risk of CO2 retention are 88-92%.**

Information for safe supply and storage of oxygen and associated delivery devices

- It is recommended that **all Hot sites have 1-2 people who are responsible** for overseeing the supply, delivery devices and safe storage of their specific sites' emergency oxygen supply
- This is to ensure the partners listed below can expedite potential solutions to queries as they arise
- All systems containing compressed gases in UK are subject to Pressure Systems Safety Regulations 2000

Helpful contacts for London: should the designated oxygen lead for your hot/cold site require assistance please contact:

1) Air Liquide: alhomecare.hcpsupport@nhs.net
2) London Oxygen Team: Nelcsu.hosnelcsu.net
3) Local Home Oxygen Service Assessment and Review (HOSAR)

[1] BTS Emergency Oxygen Therapy – 2017 https://www.brit-thoracic.org.uk/quality-improvement/guidelines/emergency-oxygen/

Appendix 2. Those considered to be at 'increased risk'.

- aged 70 or older (regardless of medical conditions)
- under 70 with an underlying health condition listed below (ie anyone instructed to get a flu jab as an adult each year on medical grounds):
- chronic (long-term) respiratory diseases, such as asthma, chronic obstructive pulmonary disease (COPD), emphysema or bronchitis
- chronic heart disease, such as heart failure
- chronic kidney disease
- chronic liver disease, such as hepatitis
- chronic neurological conditions, such as Parkinson's disease, motor neurone disease, multiple sclerosis (MS), a learning disability or cerebral palsy
- diabetes
- problems with your spleen – for example, sickle cell disease or if you have had your spleen removed
- a weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid tablets or chemotherapy
- being seriously overweight (a body mass index (BMI) of 40 or above)
- those who are pregnant

Appendix 3. Oxford COVID-19 Evidence Service Findings

Are there any evidence-based ways of assessing dyspnoea (breathlessness) by telephone or video?

We found no validated tests for assessing breathlessness in an acute primary care setting. We found no evidence that attempts to measure a patient's respiratory rate over the phone would give an accurate reading, and experts do not use this test in telephone consultations. Our search identified a potentially promising test (the Roth score), which needs further research.

Pending further research, the recommendations below are based on expert opinion. A rapid survey of 50 clinicians who regularly assess patients by phone (on 20.3.20) recommended not using the Roth score (though opinions were mixed) and gave the following advice:

Ask the patient to describe the problem with their breathing in their own words, and assess the ease and comfort of their speech. Ask open-ended questions and listen to whether the patient can complete their sentences.
"How is your breathing today?“

Align with NHS111 symptom checker, which asks three questions (developed through user testing but not evaluated in formal research):
Are you so breathless that you are unable to speak more than a few words?“
Are you breathing harder or faster than usual when doing nothing at all?
" Are you so ill that you've stopped doing all of your usual daily activities?"

Focus on change. A clear story of deterioration is more important than whether the patient currently *feels* short of breath. Ask questions like
is your breathing faster, slower or the same as normal?"
"What could you do yesterday that you can't do today"
"What makes you breathless now that didn't make you breathless yesterday?“

Interpret the breathlessness in the context of the wider history and physical signs. For example, a new, audible wheeze and a verbal report of blueness of the lips in a breathless patient are concerning.

Appendix 4. Clinical Frailty Scale (Rockwood, 2005)

The Clinical Frailty Scale is a reliable predictor of outcomes in urgent care (Not COVID-19 specific) and can support decision making. Note it should be completed on patient capabilities two weeks ago and is not validated for use with younger people (<65), people with stable long-term disabilities (e.g. cerebral palsy), learning disabilities or autism. Further guidance can be found here https://www.scfn.org.uk/clinical-frailty-scale

Clinical Frailty Scale

1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.

3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.

5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.

Appendix 5. Additional guidance on pathways for patients with PRE-EXISTING lung conditions or comorbidities

Interstitial Lung Disease – Consider ceiling of care. Many patients who have established pulmonary fibrosis, of any cause, will not do well with intubation and mechanical ventilation. Patients are likely to become hypoxic very quickly as they will not have much reserve. They will have often had advance care planning as part of their specialist care. Consider admission according to pathway 2 physiological parameters but if baseline saturations are available:

- Mild deterioration would be defined as up to 2% below their baseline
- Moderate deterioration would be defined as between 3-4% below their baseline
- Severe deterioration would be defined as 5% or more below their baseline

Pirfenidone and nintedanib antifibrotic therapy can be safely paused for 4-8 weeks during illness. Do not stop long term prednisolone and consider increasing baseline doses. Mycophenolate, mofetil and azathioprine and other immune suppressive medication would normally be paused during significant infective illnesses and restarted two weeks after recovery. Patients with interstitial lung disease should be following self-isolation guidance and if also on immune suppression consider extending this to the shielding approach.

Obstructive Sleep Apnoea – Most patients will have normal lungs but require CPAP overnight to correct daytime sleepiness. This does not affect their gas exchange and these patients should be managed as there is no pre-existing lung disease. If they need admission for hypoxia, they should take their CPAP machine with them as they may need to use it on the wards.

Bronchiectasis – During exacerbations of bronchiectasis with purulent sputum, we do not recommend routine collection of sputum samples for culture and sensitivities. If thought to be a usual exacerbation, treat with standard antibiotics (doxycycline or amoxycillin for 10-14 days) or guided by previous sputum cultures. If no response, then try empirical course of ciprofloxacin/levofloxacin and obtain specialist advice. If suspected COVID-19 infection, treat according to pathway.

Appendix 6. Resource pack to support implementation of Coordinate My Care plans at pace.

Document purpose	This resource pack has been collated to respond to the frequently asked questions in order to assist local health and care systems to increase use of Coordinate My Care (CMC).
Target audience	Commissioning and Transformation leads for End of Life, Urgent Care and Primary Care. CMC Strategic Commissioning Group members. Administration staff working in Primary care, Community Services and Acute Trusts. This pack is not aimed at front line staff. However, local leads may choose to use relevant information to support the local response to COVID-19.
Communication channels	CMC Strategic Commissioning Group members CCG End of Life leads Relevant Clinical Networks CMC Stakeholder newsletter
Background	Coordinate My Care is an accepted record of advance care plans and referenced in the Primary Care and Community Respiratory Resource pack for use during COVID-19 (issued on the 27th March (Appendix 1). CMC is a recognised source of information to aid decisions about ambulance conveyance or admission avoidance.

Frequently Asked Questions:

How can we rapidly create CMC plans for people at high risk of severe illness?

1. Practices should identify those patients who are at very high risk of severe illness from COVID-19 because of an underlying health condition (Appendix 2)
2. GP practices are able to run searches on the EPR to identify patients who:
    a. Are on their palliative care registers
    b. A moderate or severe frailty flag
    c. Using READ and SNOMED codes (Appendix 3).
    d. A new EMIS Search has been published to help identify those who are likely to be in the last year of their life and not on the palliative care register: https://www.england.nhs.uk/london/london-clinical-networks/our-networks/end-of-life-care/end-of-life-care-key-publications/
3. GP practices can invite patients by text, e-mail or letter to start their own myCMC plan. www.mycmc.online A template letter is available here: https://www.coordinatemycare.co.uk/wp-content/uploads/2020/03/my-cmc-letter-template-for-gps.docx
4. If a patient creates a myCMC plan, most of CMC fields are completed. An email will be sent to the registered GP practice notifying the practice that a patient has created a myCMC plan. The plan then just needs to be reviewed by a senior clinician and published.
5. Users can log-in to CMC either directly through their health IT systems that are configured via in-context link or by logging in with N3/HSCN access: nww.coordinatemycare.net

6. Offer those at risk of serious illness, should they contract Covid-19, the ability for relevant care and support information to be made visible to urgent and emergency services via a CMC plan.
7. Both clinical and non-clinical staff are able to create and add clinical details to a CMC plan (using information from established advance care plans recorded on their EPRs or in other formats). However, a senior clinician needs to review and publish this information.
8. Consider extending user access to CMC in nursing and care homes. For the duration of the COVID pandemic, the requirement for nursing and care homes to be DSPT compliant and have an information sharing agreement with CMC in place has been relaxed under COPI legislation. The DPIA relating to this was agreed by the London COVID-19 Information Governance group on the 31st of March 2020. Nursing and care homes staff should apply for log-ins using the online portal: https://www.coordinatemycare.co.uk/joining-cmc/
9. A CMC plan can be created very quickly. The minimum requirements necessary for a CMC care plan are:
    a. **Consent**: If a patient has a past/previous care plan on your IT System, consider if the consent includes using CMC to share this information.
    b. **Diagnosis**: The most significant diagnosis and purpose for creating the CMC plan
    c. **Prognosis:** If in doubt select “years”.
    d. **WHO performance status:** Select one**.**
    e. **Preferred Place of care:** Select “not discussed/not willing” if unknown.
    f. **Preferred Place of death:** Select “not discussed/not willing” if unknown.
    g. **CPR Discussions**: CPR is a medical decision. If it is medically not appropriate please discuss with patient/family. If, as a clinician, you are unsure if CPR should be commenced you can select “not discussed/not willing” or for full CPR.
    h. **Emergency treatment plan**: Select the appropriate recommendation/ceiling for clinical treatment. Provide free text to support emergency treatment decisions.
    i. **Medications and allergies:** Only allergies are absolutely necessary.
10. The overall clinical responsibility for decisions about CPR, including DNACPR decisions, rests with the most senior clinician responsible for the person’s care as defined explicitly by local policy. This could be a consultant, general practitioner (GP) or suitably experienced and competent nurse supported by local policy. It is recommended that anyone at Band 6 and below should not be making such decisions in isolation in any circumstance.

How can we rapidly update records for people in high risk groups?

11. Identify those patients that already have a CMC care plan. Practices can see a list of their patients who have a CMC plan on the CMC portal. This list can be filtered to view those plans that are still draft, or other relevant criteria. (Appendix 5)
12. CMC have been commissioned to create an excel spreadsheet for each CCG to identify those patients that have a CMC plan. The search will contain: CMC plan status published/draft, CPR status and last date published. **Using e-mail to share this list is NOT standard practice**. To enable this flow of data, a short form Data Protection Impact Assessment (DPIA) has been agreed by the London COVID-19 IG group under the COPI legislation.

    Please e-mail Murrae.tolson@swlondon.nhs.uk to provide the e-mail of the person for each CCG who should receive this list. This list can be used to identify and act on the following:

a. Review and **publish DRAFT CMC plans**. Please note DRAFT CMC plans are NOT visible to urgent care services.
b. Review CMC plans that were published a long time ago – they may no longer be accurate. In addition there may be further information including **symptom control guidance and access to anticipatory medication** in the home which is important to add to the record.
c. Check that the patient and **carer contact** details are correct. Administrators are able to edit and publish non clinical items like demographic details on the CMC plan.
d. Add **professional contacts** such as community palliative care teams contact details. This will enable those attending to contact professionals in an emergency situation for advice.
e. Cross reference with local search identifying vulnerable in order to identify those who do not have a CMC plan. Consider comparing this with community or social service case lists. (Return to point 1&2)

How can we increase the number of CMC plans that are viewed?

13. Some Acute and Community Services have very few staff with CMC log-ins. The practice of viewing CMC plans may not be embedded in their usual operations. Large organisations that require access for more than 50 people can collate a list of staff who should have access to CMC and submit their details using the **batch log-in** request. Note that each member of staff needs to supply their unique e-mail address. https://www.coordinatemycare.co.uk/joining-cmc/. (Appendix 5.)

    Some Trusts have arranged CMC log-ins for ED administrators and FY1s and FY2s. E-mail the attached list to coordinatemycare@nhs.net by 9am Monday morning for log-ins to be issued by close of Tuesday, or by 9am Thursday morning for log-ins to be issued by close of Friday.
14. Some Trusts have arranged for clinicians and non-clinicians to check if patient presenting at ED have a CMC plan. Attached quick guide explains how the CMC urgent care summary can be printed in order to attach to the admission notes. (Appendix 6)

Appendix 1: Primary Care and Community Respiratory Resource pack for use during COVID-19

PDF

Primary Care and Community Respirat

Appendix 2: Those considered to be at increased risk:

- Aged 70 or older (regardless of medical conditions)
- Under 70 with an underlying health condition listed below (i.e. anyone instructed to get a flu jab as an adult each year on medical grounds)
- Chronic (long-term) respiratory diseases, such as asthma, chronic obstructive pulmonary disease (COPD), emphysema or bronchitis
- Chronic heart disease, such as heart failure
- Chronic kidney disease
- Chronic liver disease, such as hepatitis
- Chronic neurological conditions, such as Parkinson's disease, motor neurone disease, multiple sclerosis (MS), a learning disability or cerebral palsy
- Diabetes

- Problems with spleen – for example, sickle cell disease or have had your spleen removed
- A weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid therapy or chemotherapy
- Being seriously overweight (a body mass index (BMI) of 40 or above)
- Those who are pregnant.

Appendix 3: READ and SNOMED codes relating to resuscitation.

READ codes relating to resuscitation.docx

Appendix 4: CMC Practice list functionality

CMC Quick guide Practice search.pdf

Appendix 5: CMC Batch log-in request (50+ users)

CMC BATCH-LOGIN-UAF-5

Appendix 6: How to find and print the CMC urgent care summary

CMC Find and print urgent care summary

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Appendix 7. Managing your breathlessness at home during the corona virus (COVID-19) outbreak leaflet

Managing breathlessness at home during the COVID-19 outbreak

Many pre-existing conditions, such as heart or lung diseases, cause breathlessness. Breathlessness can be very frightening and distressing, even in milder cases, and may be worsened by fears relating to the corona virus. During the current corona virus outbreak, you may have reduced access to your usual support networks. It is important that you continue the usual treatments for your underlying conditions (e.g. inhaler). **It's okay to contact your usual health and social care team for support.**

If you think you may have corona virus, please use the 111 online corona virus service to find out what to do (111.nhs.uk). If you are unable to use the online service, please phone 111.

The following steps may help you feel less breathless. You might find some of these steps more helpful than others. Try them out and use the ones that you find most helpful:

Finding a comfortable position can ease your breathlessness, try these:

Sit upright in a comfortable armchair with both arms supported on the chair arms or cushions. Let your shoulders drop and relax. Rest the soles of your feet on the floor.

Sit on a chair and let your body flop forwards. Rest both arms on a table or your knees to support you.

Lie on your side propped up with pillows under your upper body. Tuck the top pillow into your neck to support your head. Rest your top arm on a pillow placed in front of your chest and your top leg on another.

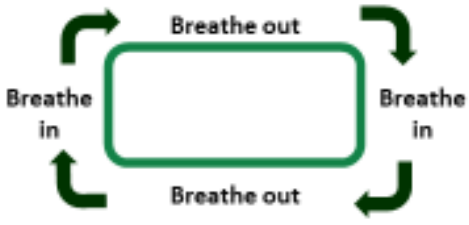
In your comfortable position, loosen your wrists, fingers and your jaw.

Abdominal and tummy breathing
Rest a hand on your tummy and breathe in gently to feel your tummy rise. Then breathe out slowly through your nose or your mouth. Rest and wait for the next breath to come. You may find it helpful to purse your lips while you breathe out slowly as though you were making a candle flame flicker.

Slowing down
When you are comfortable with the tummy breathing, try to slow down the speed of your breathing. When you slow down, your breathing becomes deeper, which is more efficient. Imagine air filling your tummy like a balloon. Practicing regularly will make it easier to do when you are breathless.

Breathe a rectangle

- Once you have found a comfortable position, look around for a rectangle. This might be a window, a door, picture, or even a book or television screen.
- Now follow the sides of the rectangle with your eyes as you breathe, breathing in on the short sides and out on the long sides.
- Gradually slow the speed that your eyes move round the rectangle, pausing at the corners to help slow your breathing.



Cooling the face
Cooling the face, especially around the nose, can help reduce how breathless you feel. You can try wiping a cool wet flannel on your nose and upper cheeks of your face. The use of fans is not being recommended during the coronavirus outbreak due to the risk of it spreading infection.

Tips for living with breathlessness at home:

When walking

- Move at a comfortable pace, and breathe steadily
- Avoid holding your breath, or trying to move or turn too fast
- Pace your breathing to your steps; breathe in over one step, breathe out over the next two steps
- Use walking aids if they help you
- Stop and rest whenever you need to.

When climbing steps or stairs

- Use the handrail when climbing stairs and take the steps slowly. Try resting for at least five seconds every few steps.

During day to day activities

- Keep things you use often close to hand
- Have a charged phone close to your bed or armchair
- Plan ahead with your chores or daily activities, such as bathing or housework
- Spread your activity throughout the day
- Have everything you need before you start an activity
- Rest between activities or when your breathing begins to feel uncomfortable.

When feeling anxious

- Remember that this is a worrying time with a lot of uncertainty, so it is natural to feel worried
- There are many ways to deal with worried feelings. These include mindfulness, listening to relaxing music, or doing gentle activity such as gardening, yoga or singing.

When eating and drinking

- Take small meals often, rather than one large one
- Eat smaller mouthfuls
- Avoid foods that are difficult to chew, add sauces when possible
- Drink sips of fluid often to avoid becoming dehydrated.

Keep in touch

- Stay in touch with friends and relatives by using the phone and other technology and writing letters.

Keep active

- It is important to stay as active as you can, to prevent your muscles becoming weaker.

It's okay to ask for help.
Please continue to contact your usual health and social care teams if you need further support.

Further Resources for people with breathlessness:

- Cicely Saunders Institute: kcl.ac.uk/cicelysaunders/research/symptom/breathlessness
- St Christopher's Hospice: stchristophers.org.uk/videos/managing-breathlessness
- Hull York Medical School: breathlessness.hyms.ac.uk
- British Lung Foundation: blf.org.uk/support-for-you/breathlessness/how-to-manage-breathlessness
- Life of Breath Project: lifeofbreath.org/category/resources

References: *Bausewein et al. 2008. Cochrane CD005623; Brighton et al. Thorax 2019;74:270-1.*
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