NHS
Kernow
Clinical Commissioning Group

Standard operating procedure

Procedure: NHS Kernow Clinical Commissioning Group standard operating procedure for out of hospital treatment pathways for adult patients with coronavirus (COVID-19)

Number: 1

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Procedure overview

This standard operating procedure (SOP) sets out the NHS Kernow Clinical Commissioning Group (NHS Kernow) position on community treatments for coronavirus (COVID-19) in adults.

Other (reference documentation)

This document has been adapted with kind permission of Kent and Medway Clinical Commissioning Group (CCG) for use in NHS Kernow from their document Kent and Medway Standard Operating Policy for Out of Hospital Treatment Pathways for Adult Patients for COVID-19, available in full on the British Geriatric Society website.

Requirements

Clinicians caring for patients with COVID-19 in Cornwall and the Isles of Scilly are asked to follow the guidance when considering treatment for their patients.

Procedure

Background and context

The COVID-19 pandemic was formally declared in England in February 2020.

During the first wave of the pandemic, several initiatives were developed to help people living with frailty to make decisions about their care and receive care in their normal place of residence if that was the preferred option.

During this period there were very limited treatment options available to people with coronavirus who wanted to remain at home and so much of the clinical input to this group of patients was based on symptom management and, when appropriate, palliative care.

The second wave of coronavirus has now started and there is an opportunity to use the learning from the first wave to increase the treatment options available to people outside of hospital. NHS England and NHS Improvement have undertaken a review of the evidence for use of a number of community treatments in collaboration with the British Geriatric Society (BGS) and there is formal guidance awaiting publication. Kent and Medway CCG developed this SOP to support implementation ahead of the formal publication of the guidance but informed by the consensus that is emerging through that development process.

The SOP from Kent and Medway CCG has been adapted with kind permission from Kent and Medway CCG for use in NHS Kernow.

Purpose of this guidance

This SOP sets out the NHS Kernow position on community treatments for coronavirus in adults. It is intended to reflect the growing national consensus on the evidence and will be updated when formal guidance is published in this area. The SOP outlines the principles that should inform the clinical decision to initiate and monitor a treatment pathway as well as guidance on prescribing and identifying indicators that a treatment should be stopped.

This document includes considerations of the risks and benefits of these pathways and the potential ethical issues related to the rapid introduction of these treatments.

It is important to note that the complexity of clinical needs is such in many of these patients that if they were being managed similarly in the hospital settings, the decision making would involve many specialists and their multidisciplinary team. Therefore, clinicians in the community are encouraged to seek further guidance whenever in doubt from our acute specialists in any given situation.

Individual provider organisations will need to ratify this guidance through their own governance structures.

Patient group

This SOP has been developed primarily for adults living with frailty as the effect of coronavirus on this group during the first wave was disproportionate compared to other groups. However, it may be beneficial to follow these pathways for other patient groups and this should be done at the discretion of the senior treating clinicians.

If appropriate other specialist services should be asked to support the process. For example, these pathways may be appropriate for people with learning disabilities living in a care home environment but should only be initiated with specialist learning disability support to plan implementation tailored to the individual.

Development

The original SOP was developed by a small clinically led group with wider engagement with the following organisations:

- Kent and Medway CCG (including primary care clinical leads)
- Kent Community Health NHS Foundation Trust
- Medway Community Healthcare
- Virgin Care
- Pilgrims Hospices
- Heart of Kent Hospice
- Ellenor Hospice
- Integrated Care 24
- South East Coast Ambulance Service NHS Foundation Trust
- Kent Surrey Sussex Academic Health Sciences Network

This SOP has now been adapted by NHS Kernow and Cornwall Partnership NHS Foundation Trust (CFT) for use in Cornwall.

Treatment pathways

This SOP sets out guidance for the use of the following treatments in community hospitals, care homes and peoples own homes:

- Oxygen
- Dexamethasone
- Anticoagulant
- Fluid management

Referral routes to primary care COVID-19 oximetry at home

A primary care allied service has been developed for increased monitoring of COVID-19 in the community, sitting between self-management and admission/palliation. This is a CFT nurse-led service, which often may need the support of the referring GP at times (for example, establishing chronic obstructive pulmonary disease (COPD) baseline, palliation planning where appropriate, discharge of the anxious patient, etc). This service runs 9am to 5pm Monday to Friday.

For more information on the service, referral and assessment pathways please see the acute GP website.

Treatment escalation plans

There is a standard treatment escalation plan (TEP) form across Cornwall, which can be found on the Royal Cornwall Hospitals NHS Trust (RCHT) internet.

The single treatment escalation plan (TEP) is underpinned by the principle that all patients should have the opportunity to make informed decisions about the care that they receive. If a patient is unable to engage in this process then a decision can be made in their best interests but this should be done in conjunction with family members and adhere to the principles of the Mental Capacity Act in ensuring it reflects the patient's previous behaviours and beliefs.

The TEP should be completed by a clinician that knows the patient and can also be supported by other professionals who know the patient such as care home managers or carers. The TEP should be the formal documentation of a good quality conversation or conversations that have taken place between the patient, their family and the appropriate clinicians and professionals.

The TEP is an essential part of this SOP as it provides the patient perspective that should underpin treatment decisions. If a TEP is not in place, then it should be completed as part of the acute episode prior to initiating any of the pathways documented here.

Prior to initiating treatment, the senior clinician should review the TEP in the context of the patient's current presentation and the wider context of the health system. This will allow the clinicians to present an accurate reflection of the potential risks and benefits of treatments in different environments. This is particularly important in the context of coronavirus as the pressures on different parts of the system at any one time may change the treatment options available.

The importance of using language that is clear, unambiguous, and understood by the patient and their families is vital. As is clear clinical documentation of ceilings of care and with pros and cons of the options shared with patient, including risk of deterioration and death as a consequence of choices made.

Ethical considerations and clinical support

The pathways in this SOP have been developed based on new evidence and clinical consensus from the first wave of coronavirus and therefore clinicians working in the community should feel supported to seek senior review or advice prior to initiating these pathways.

Clinicians may have to make decisions in challenging circumstances or when resources are limited. It is not possible to anticipate all of these risks and circumstances in this document and therefore the role of the senior clinician in assessing the risks and benefits of potential treatments is crucial. A helpful guide is available to support decision making: planning for and managing COVID-19: ethical decision-making tool.

The principles in this document are that decisions should be based fair, inclusive, transparent, reasonable, accountable, and responsive to the maximum extent possible. The tool provides steps to follow to support decision making. As with any

complex ethical dilemmas involving clinical decision making, senior colleagues within each organisation, such as the frailty or acute response teams and acute clinicians, should be consulted. The reasoning for decisions should be clearly documented to support any future reflections.

Oxygen

Principles of use

During the first wave of coronavirus, some community clinicians used flow rates of up to 4L/min to support patients with mild to moderate hypoxia. In adopting an oxygen treatment pathway of this type in the community, reference should be made to the NHS Kernow: oxygen therapy outside acute settings during the COVID-19 pandemic (see appendix 4).

This guidance helps to identify the factors that should be considered before initiating this pathway and the clinicians who should be involved in decision making and monitoring. This guidance is being adopted across NHS Kernow.

If the oxygen treatment pathway is initiated, it is essential that the core standards are adhered to as follows:

- Oxygen should be prescribed on the prescription chart along with specific target saturation levels.
- The clinical indication should be clearly documented.
- Pulse oximetry should be in place and recorded at a minimum of 4 times daily.
- Patients should have a risk assessment completed prior to initiation of oxygen.
- Equipment provided should be checked daily.
- Oxygen should be stored safely.
- Staff must be appropriately trained.

Pathway

See appendix 1 and 2 for pathway documents in different settings.

Patients with confirmed or suspected coronavirus should have a TEP in place and so if there is not a TEP, an appropriate referral should be made to ensure one is completed prior to treatment starting. Patients should also be reviewed clinically, under the guidance of the general practitioner to identify any deterioration in presentation.

If deterioration is noted then the pathways in appendix 1 and 2 should be used to support treatment decisions.

The decision to initiate treatment should be made by an appropriate senior clinical decision maker (SCDM). If possible, this should be in conjunction with specialist community respiratory teams, or at a minimum, the respiratory team should be

informed. Secondary care teams should be used for advice and guidance if indicated.

Oxygen supply should be requested via the home oxygen ordering form (HOOF). This will require risk assessment form Initial Home Oxygen Risk Mitigation (IHORM) and Home Oxygen Consent Form (HOCF).

Treatment should be monitored as per the pathways with the SCDM monitoring for identified risks, appropriate use of equipment and training needs. It is likely that community services such as community nursing and rapid response will support ongoing monitoring. The decision to stop treatment will be clinically judged with reference to the indicators in appendix 3.

Dexamethasone

Principles of use

Dexamethasone can be prescribed for people with coronavirus based on the published National Institute for Health and Care Excellence (NICE) COVID-19 rapid guideline: managing COVID-19, in most cases it should be used in conjunction with oxygen as per the previous section. For more information including guidance on when to prescribe and dosing information, please see the NICE guidance. Dosing information can be found under the 'practical info' tab on the NICE guidance.

If the dexamethasone pathway is initiated, clinicians should consider use of gastro-protection. If the patient is diabetic, then close blood sugar level monitoring should take place.

Pathway

See appendix 1 and 2 for pathway documents in different settings.

Patients with confirmed or suspected coronavirus should have a TEP in place and so if there is not a TEP, an appropriate referral should be made to ensure one is completed. Patients should also be reviewed clinically under the guidance of the general practitioner to identify any deterioration in presentation.

If deterioration is noted then the pathways in appendix 1 and 2 should be used to support treatment decisions.

The decision to initiate treatment should be made by an appropriate SCDM. The SCDM is likely to be a clinician from a community response service such as a frailty team or acute response team. The initiation of treatment should be managed in conjunction with the patient's GP who should be able to support prescribing and provision of necessary monitoring equipment as appropriate.

Treatment should be monitored as per the pathways with the SCDM monitoring for identified risks and training needs. It is likely that community services such as community nursing and rapid response will support ongoing monitoring. The decision

to stop treatment will be clinically judged with reference to the indicators in appendix 3.

Anticoagulants for venous thromboembolism (VTE) prophylaxis

Principles of use

Patients with coronavirus have an increased risk of venous thromboembolism (VTE) and therefore VTE prophylaxis should be considered to align the standard of community care with that delivered in acute patient settings.

The NICE guidance on VTE prophylaxis in the COVID-19 rapid guideline: managing COVID 19 should be followed wherever possible.

If the anticoagulation pathway is initiated, it is essential that the following criteria are met:

- Resources should be in place to take baseline bloods to support prescribing.
- The location (community hospital, care home or patients' home) need to be able to support subcutaneous injections. If subcutaneous injections cannot be administered a direct-acting oral anticoagulant (DOAC) can be considered on an individual case basis (see hospital-led acute care in the community pathway for more details) unless contraindicated.
- Patients medical history and renal function must be considered, and appropriate medication prescribed
- A bleeding risk assessment should be completed a soon as possible to support decision making and should be repeated every 7 days (or sooner if patients condition changes). Depending on patients ongoing risk of VTE, consideration of extended VTE prophylaxis may be necessary. A tool commonly used to develop a treatment plan for patients is the Department of Health VTE risk assessment tool.
- If proceeding with low molecular weight heparin (LMWH) treatment- platelet count should be measured alongside renal function and potassium levels (at baseline start and thereafter every 7 days)
- If a DOAC is considered, then the patients existing medication should be reviewed for any interactions.
- Patients should be aware the use of a DOAC is off-label though has been regularly used without problems and is licensed for similar treatments.

For further information on prescribing of LMWH, please see the RCHT thrombosis prevention and anticoagulation policy. There is also a leaflet for patients available developed by CFT: reducing the risk of VTE in hospital and after discharge, which may be helpful.

Hospital setting pathway

Full guidance can be found in the NICE guidance on VTE prophylaxis in the COVID-19 rapid guideline: managing COVID 19.

Hospital-led acute care in the community pathway

In line with NICE guidance, this includes settings in which patients who would otherwise be admitted to hospital receive acute medical care provided by members of the hospital team, often working with the patient's GP team. They include 'hospital at home' services and COVID-19 'virtual wards'.

Full guidance can be found in the NICE guidance on VTE prophylaxis in the COVID-19 rapid guideline: managing COVID 19.

NICE guidance recommends LMWH should be used for VTE prophylaxis in COVID-19 patients. There is currently no evidence to support use of DOACs for VTE prophylaxis in COVID-19 patients; NHS England has recommended that this is a further area for research. NHS England has stated in draft guidance 'we recognise, however, that in community settings DOACs may be more suitable as an alternative to a parenteral mode of delivery.'

If it is not possible to deliver LMWH injections in line with NICE guidance, DOACs could be considered for VTE prophylaxis, however, this will be a clinical decision based on risk-benefit for the patient. Patients and prescribers should be aware that this is an off-label use of DOACs and existing medication must be checked for any potential interactions.

There is no current evidence on choice of DOAC for VTE prophylaxis in COVID patients, however, an option which has been used elsewhere and which may be considered is apixaban 2.5mg twice a day (NB please consider patients weight and clinical parameters when choosing a DOAC and dose)

Pathway

See appendix 1 and 2 for pathway documents in different settings.

Patients with confirmed or suspected coronavirus should have a TEP in place and so if there is not a TEP, an appropriate referral should be made to ensure one is completed prior to treatment. Patients should also be reviewed clinically under the guidance of the general practitioner to identify any deterioration in presentation.

If deterioration is noted then the pathways in appendix 1 and 2 should be used to support treatment decisions.

The decision to initiate treatment should be made by an appropriate SCDM. The SCDM is likely to be a clinician from a community response service such as a frailty team or acute response team. The initiation of treatment should be managed in conjunction with the patient's GP who should be able to support prescribing and review of existing medications.

The patients GP should advise on dose adjustments if required (for example, due to renal function). A bleeding assessment should be completed; A tool commonly used to develop a treatment plan for patients is the Department of Health VTE risk assessment tool.

Treatment should be monitored as per the pathways with the SCDM monitoring for identified risks and training needs. It is likely that community services such as community nursing will support ongoing monitoring. The decision to stop treatment will be clinically judged with reference to the indicators in appendix 3.

Fluid Management

Principles of use

Dehydration and acute kidney injury (AKI) in patients with coronavirus is common and associated with an increased risk of dying. Maintaining fluid status reduces the risk of AKI. Risk factors for AKI include pre-existing chronic kidney disease, heart failure, liver disease, history of AKI and aged over 65. Reference should be made to the NICE COVID-19 rapid guideline: managing COVID-19.

Pathway

See appendix 1 and 2 for pathway documents in different settings.

Patients with confirmed or suspected coronavirus should have a TEP in place and so if there is not a TEP, an appropriate referral should be made to ensure one is completed prior to treatment. Patients should also be reviewed clinically under the guidance of the general practitioner to identify any deterioration in presentation.

If deterioration is noted then the pathways in appendix 1 and 2 should be used to support treatment decisions.

Current medications should be reviewed, and treatments suspended as appropriate for example, SGLT2 inhibitors, ACE inhibitors, diuretics, metformin, ARBs, NSAIDs.

The decision to initiate treatment should be made by an appropriate SCDM. The SCDM is likely to be a clinician from a community response service such as a frailty team or acute response team.

Assessment of fluid status should be based on clinical examination and appropriate investigations where available. Review of routine medications should be considered in conjunction with the patients GP. Where appropriate, oral hydration should be used to increase fluid intake. Where this is not possible, subcutaneous fluid should be considered if there are the resources within the community to deliver this.

Treatment should be monitored as per the pathways with the SCDM monitoring for identified risks and training needs. It is likely that community services such as community nursing and rapid response will support ongoing monitoring. The decision

to stop treatment will be clinically judged with reference to the indicators in appendix 3.

Palliative care

The decision to provide palliative care to a patient should be made with reference to their TEP and in discussion with the patient and family.

The pathways in appendix 1 and 2 indicate where a palliative approach should be considered and should be used to support decision making. Where a palliative pathway is initiated, appropriate palliative care services should be involved and medication should be in place proactively to support symptom management. There is an end of life resource and support tool available on the joint formulary website under palliative care resources. Links for guidance on COVID parenteral drugs for end of life care and also COVID non-parenteral drugs for end of life care can be found within this document on page 11. There is also guidance available for prescribing in patients with renal impairment at the end of life (estimated glomerular filtration rate <30).

The prescription sheet for subcutaneous syringe driver and injectable drugs can be used for prescribing of medication for end of life care. Clinicians and care staff should be extra vigilant for the sudden deterioration such patients may develop and ensure the patient, families and supportive teams are involved proactively.

Out of hours (OOH) considerations

These guidelines are primarily for use within hours. It is anticipated that treatments will be started within these hours by a senior clinician within an appropriate community service such as a specialist frailty or acute response team.

If oxygen is started at the end of a shift then there is potential for the oxygen to arrive after the service has closed. On delivery staff will be trained by the supplier and so out of hours (OOH) services should not need to be contacted unless there is a change in presentation.

If a patient deteriorates then OOH services should be accessed as per normal pathways of care and escalation. The OOH contact details should be clearly shared and emphasised to the patient, their families and carers involved. The OOH clinicians should be made aware of any treatment pathways that a patient is on and informed of the content of the TEP.

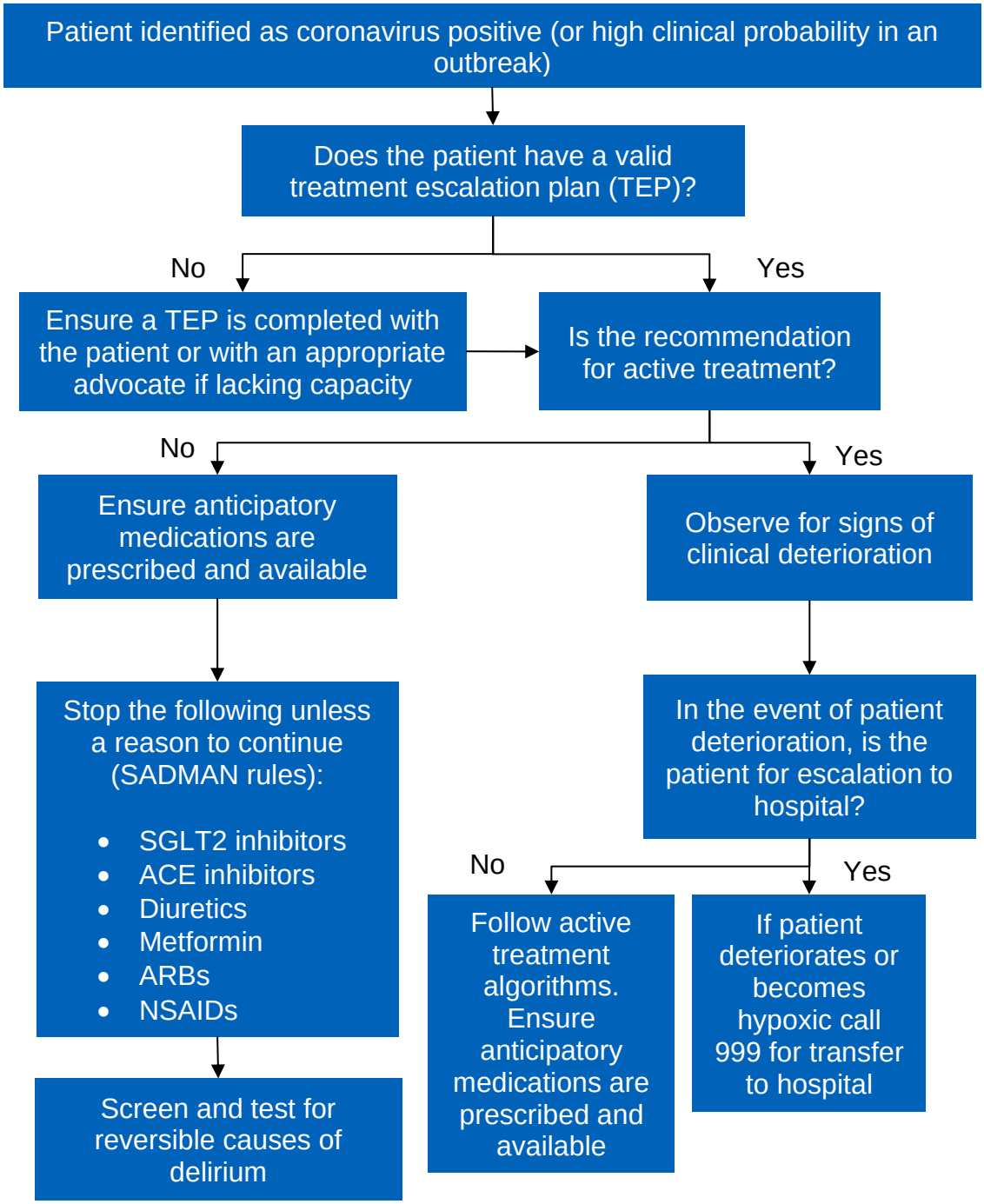
Clinicians should be aware that OOH services may not be able to view TEPs electronically and therefore patients in their own home or care home staff should be reminded to share TEPs with out of hour's providers.

As per the pathway charts in appendix 1 and 2, anticipatory medication should be provided to patients on treatment pathways in case they deteriorate out of hours.

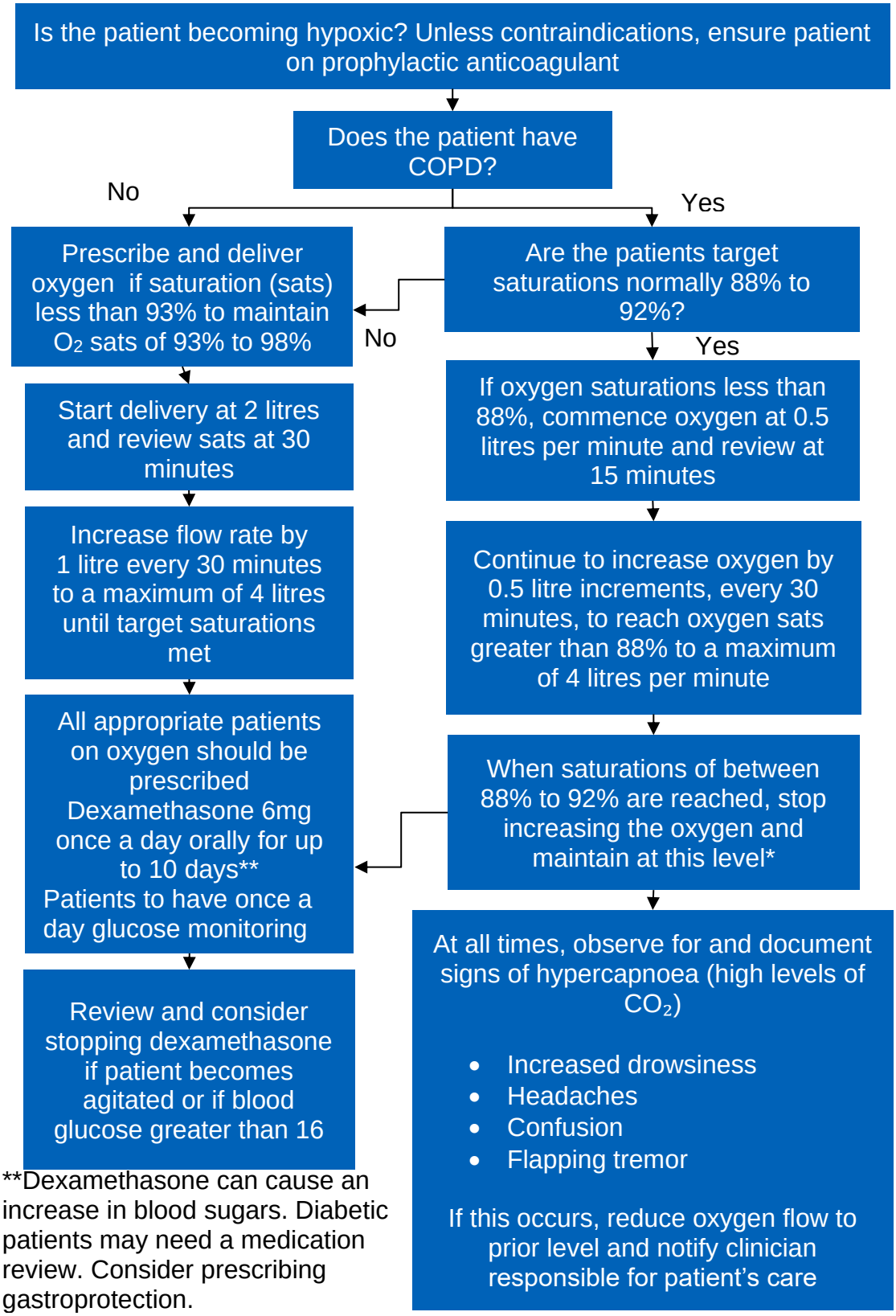
Please see the guidance on end of life prescribing in the palliative care section of this document for support. Clinicians should be aware that access to anticipatory medications can be challenging overnight and so anticipatory prescribing is recommended.

Appendix 1: Care home pathways

Draft algorithm for COVID-19 treatment options in care home setting

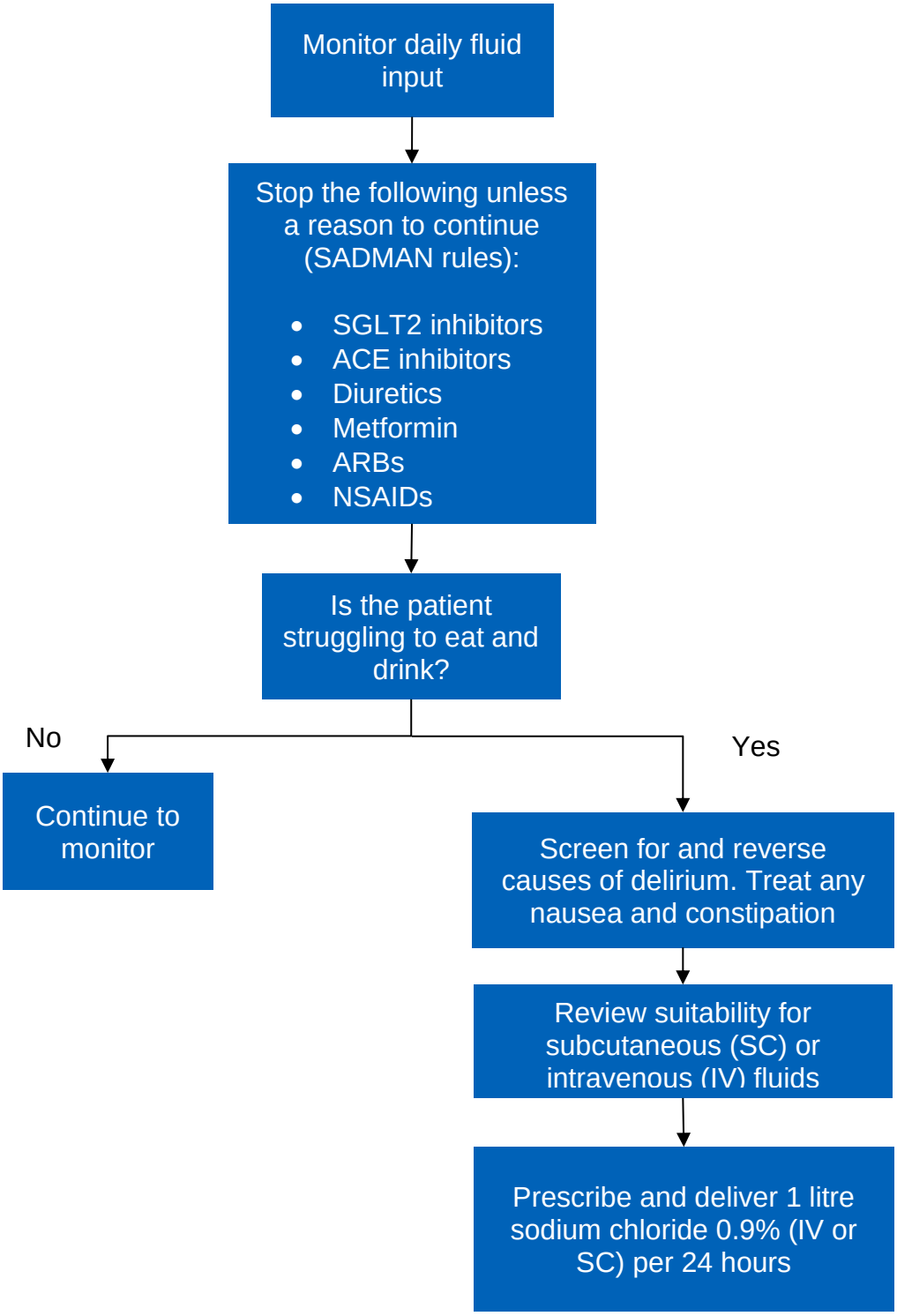


Proposed algorithm for active COVID-19 treatment in a care home setting - oxygen and dexamethasone

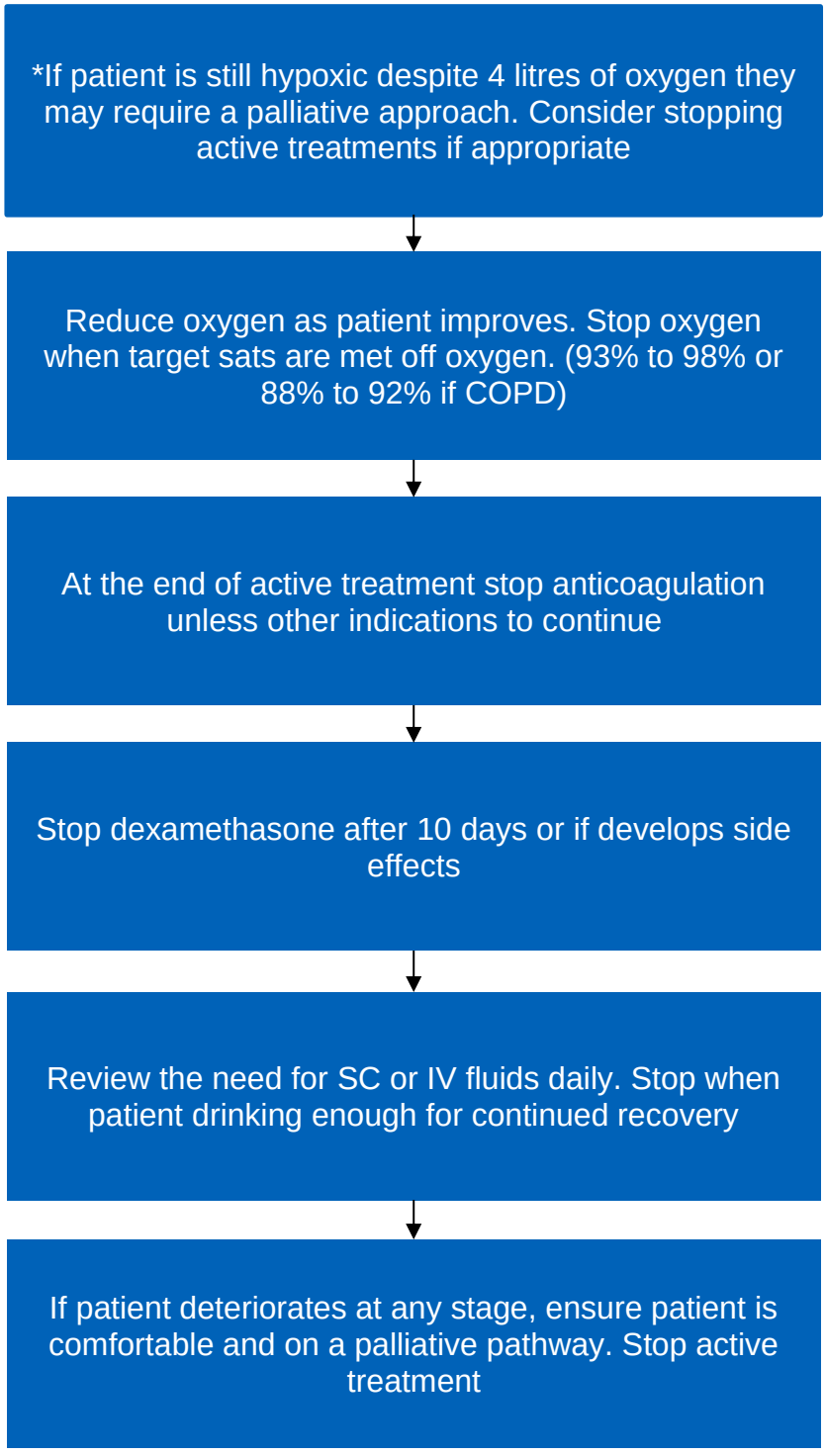


**Dexamethasone can cause an increase in blood sugars. Diabetic patients may need a medication review. Consider prescribing gastroprotection.

Proposed algorithm for active COVID-19 treatment in a care home setting – hydration

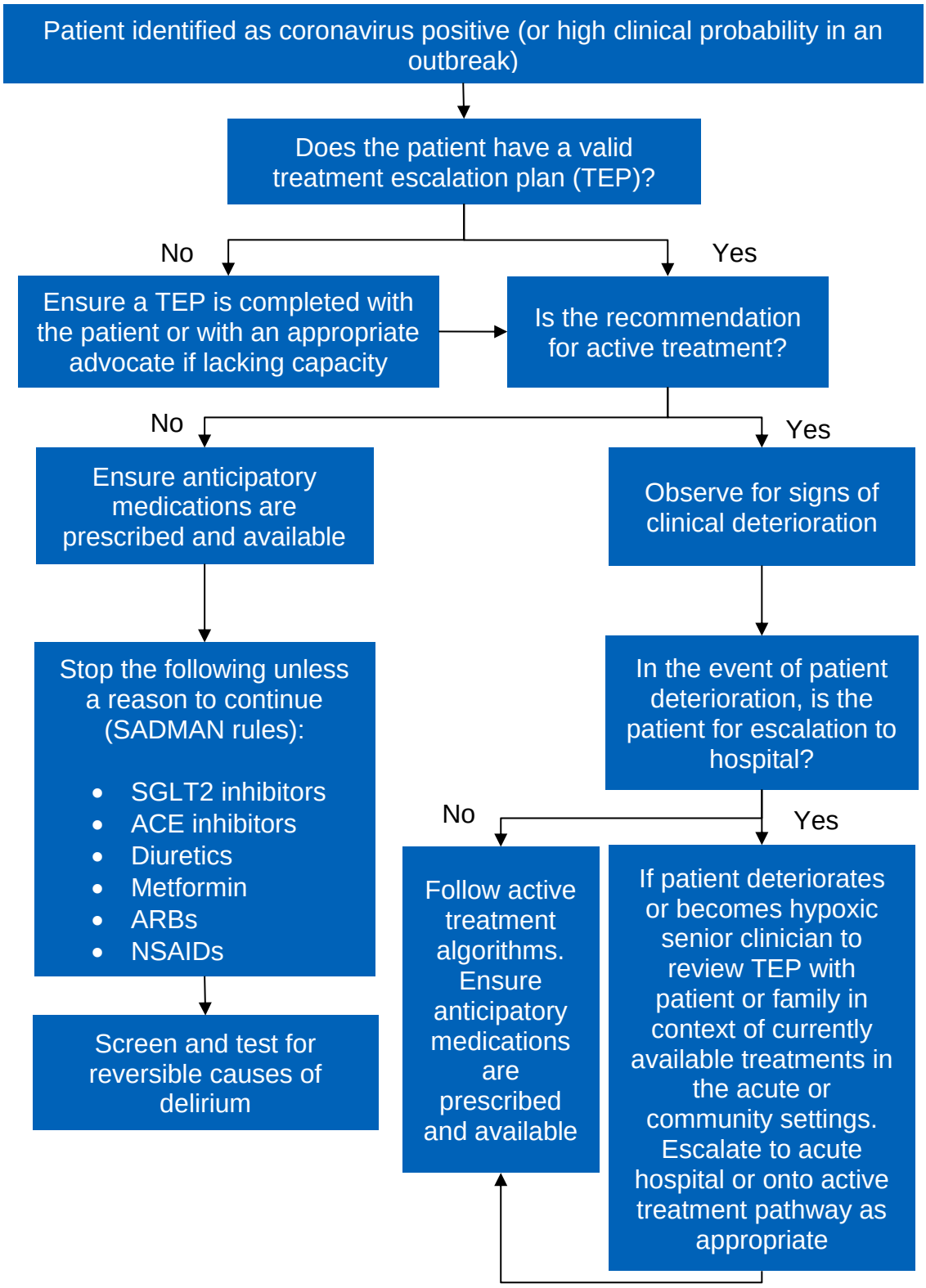


Regular reviews

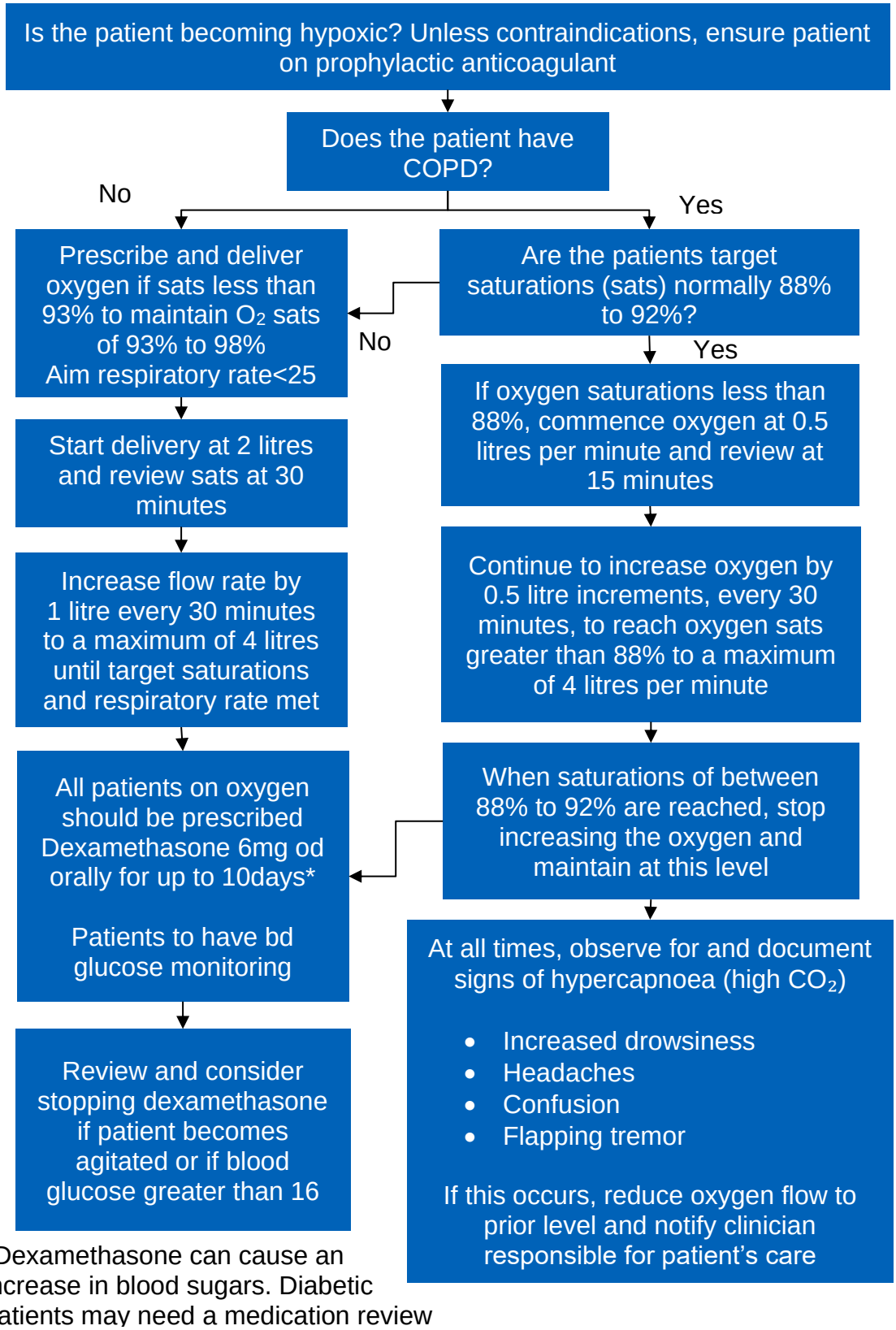


Appendix 2: community hospital pathways

Draft algorithm for COVID-19 treatment options in community hospital setting

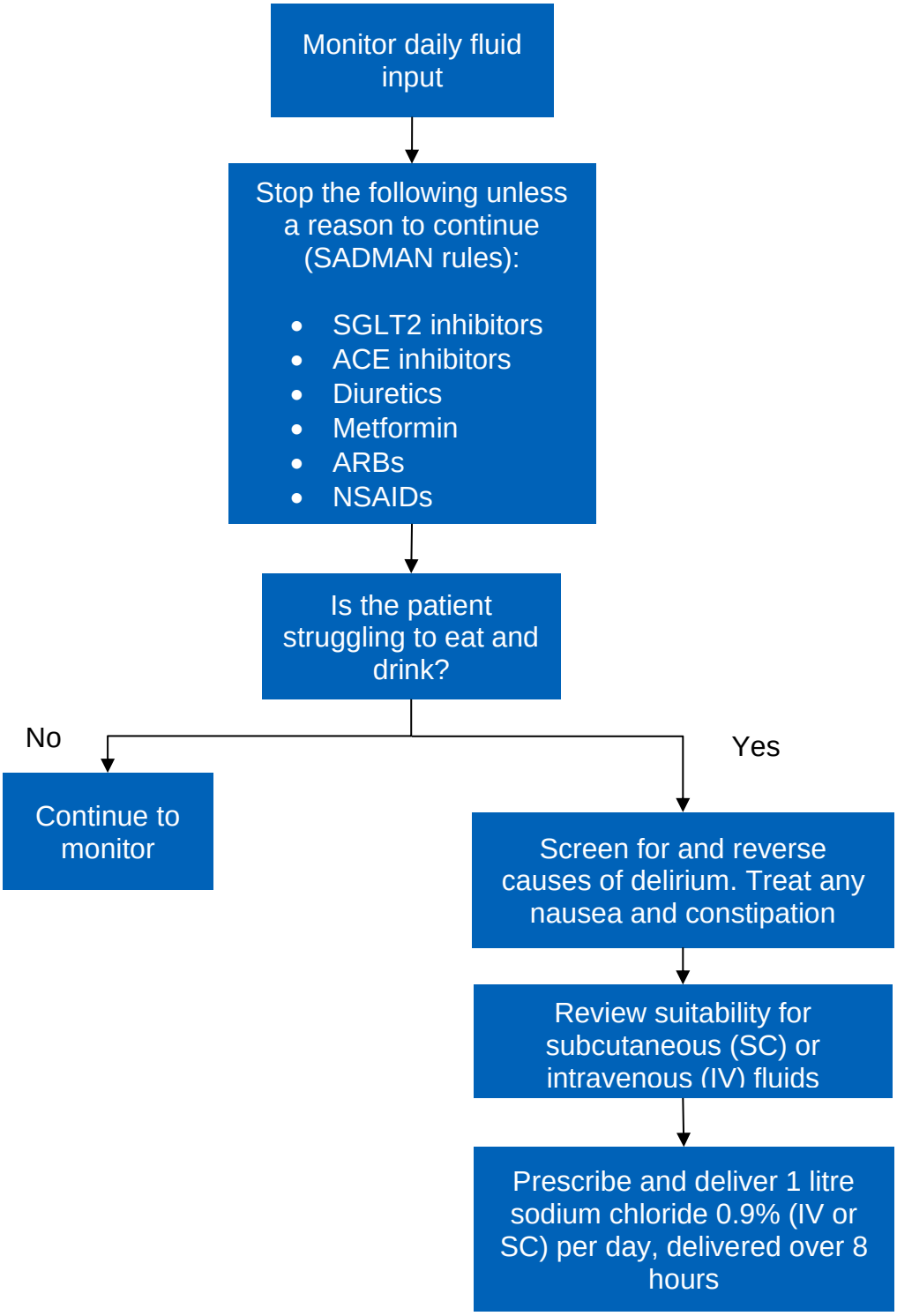


Proposed algorithm for active COVID-19 treatment in a community hospital: oxygen and dexamethasone

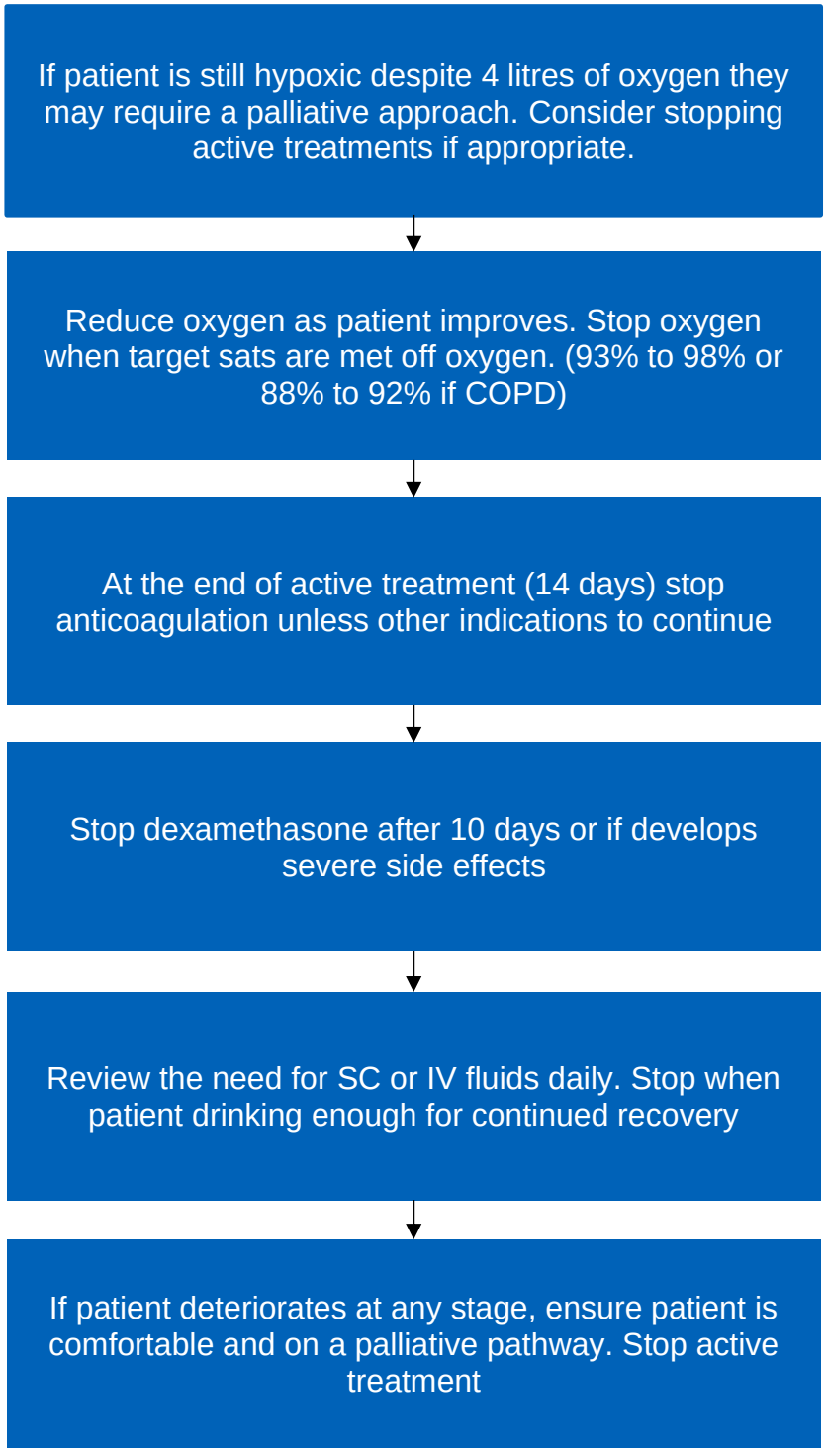


*Dexamethasone can cause an increase in blood sugars. Diabetic patients may need a medication review

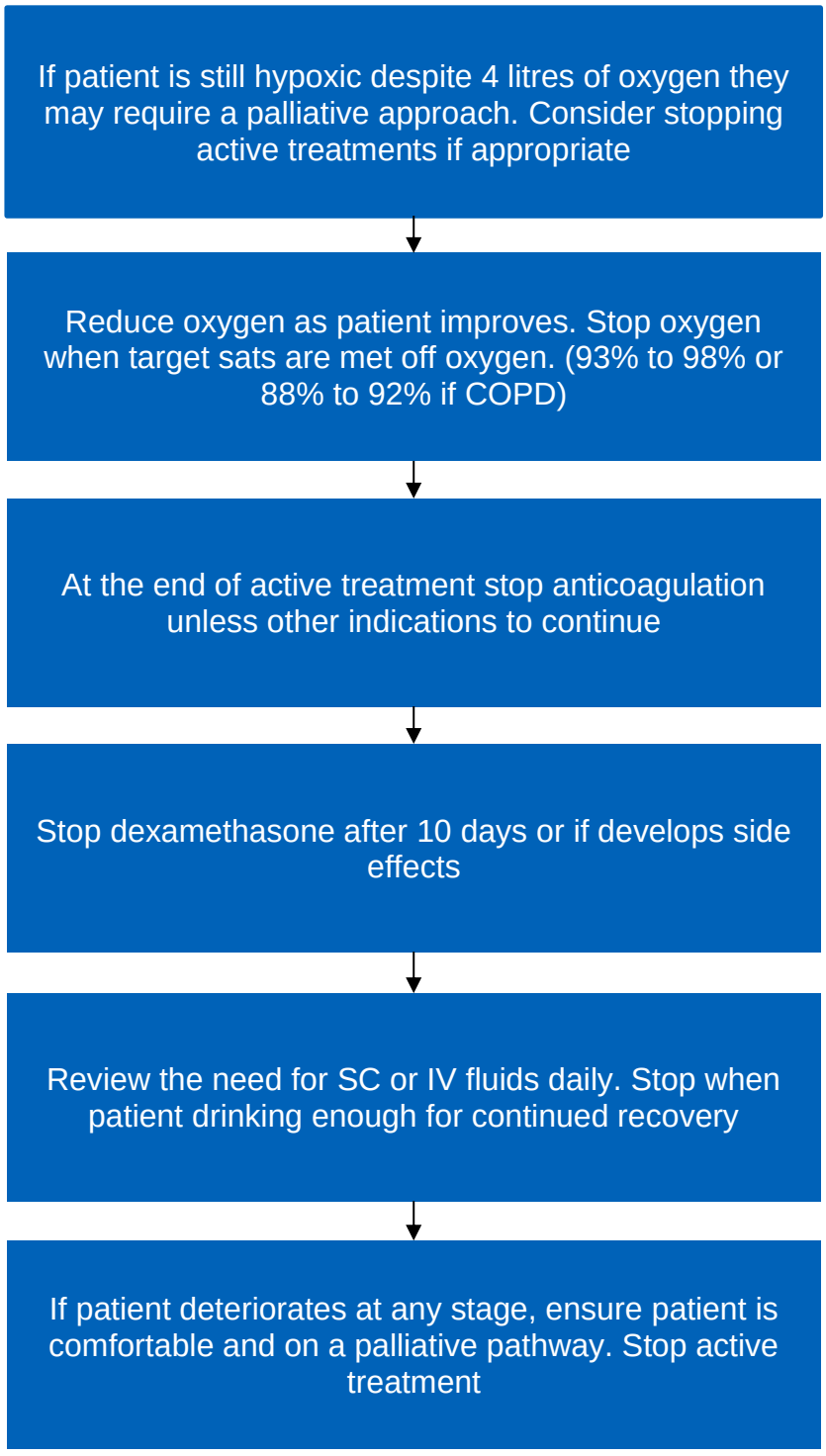
Proposed algorithm for active COVID-19 treatment in a community hospital: hydration



Daily reviews



Appendix 3- considerations for reviews



Appendix 4: Coronavirus standard operating procedure: oxygen therapy outside acute settings in Cornwall during the coronavirus pandemic

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

Contents

Oxygen therapy outside acute settings during the coronavirus pandemic

This document has been developed to support clinicians with provision of oxygen therapy for coronavirus patients outside the acute hospital setting.

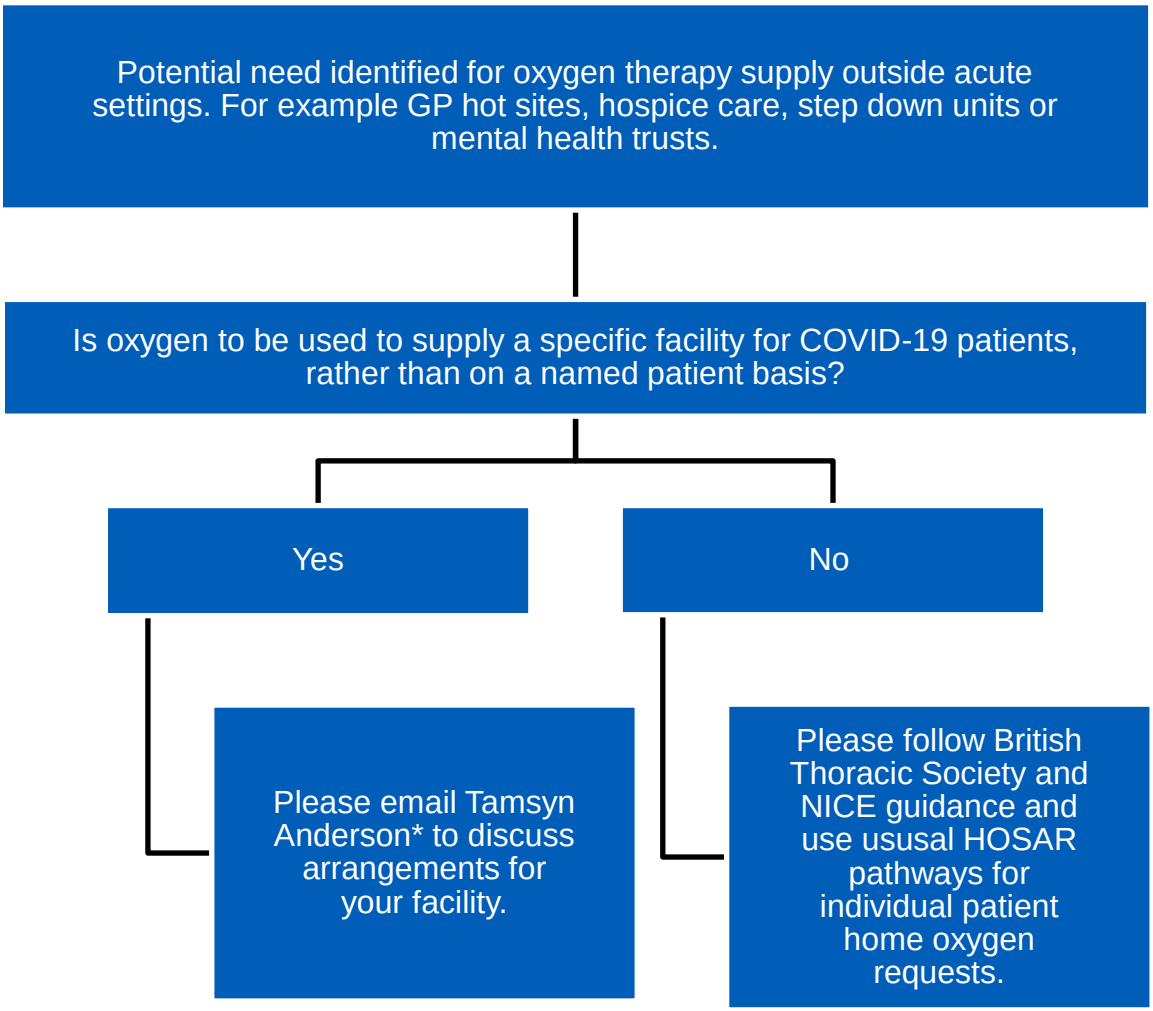
Before considering this, healthcare professionals are asked to adhere to 3 key principles to ensure prescription and supply of oxygen is safe, effective and as evidence based as possible.

1. The local respiratory clinical lead, palliative care clinical lead and/or local home oxygen assessment and review service (HOSAR) are aware of and have ratified the oxygen treatment pathway proposed.

2. The pathway is supported by a clinical oxygen protocol specific to the setting of care and cohort of patients (such as an intermediate care facility) which is consistent with principles of good medical oxygen practice namely:

    1. administration of oxygen to treat hypoxia not breathlessness
    2. setting and documentation of appropriate target oxygen saturations for each patient in line with guidance
    3. documented prescription of oxygen for each patient to include appropriate interface and range of flow rates to achieve target oxygen saturations
    4. appropriate training of staff in administration, monitoring and weaning of oxygen and use and storage of oxygen equipment

3. There is a nominated clinical lead responsible for ensuring that this clinical oxygen pathway has appropriate local governance approval and ongoing review.



*tamsyn.anderson@nhs.net

Please see below for the guiding principles around home oxygen prescription in specific situations.

Patients with suspected or confirmed coronavirus assessed within primary care hot sites

This section has been developed to support clinical decision making in the use of oxygen therapy for specific patient groups or settings.

This is defined as emergency oxygen and therefore falls under the remit of British Thoracic Society (BTS) emergency oxygen guidance 2017.

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 coronavirus. It was developed using the BTS guidelines for emergency oxygen and expert clinical consensus across London and has been adapted for use in the south east.

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 patients who are:

- breathless and have oxygen saturations (presuming no underlying lung disease) <94%
- 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).

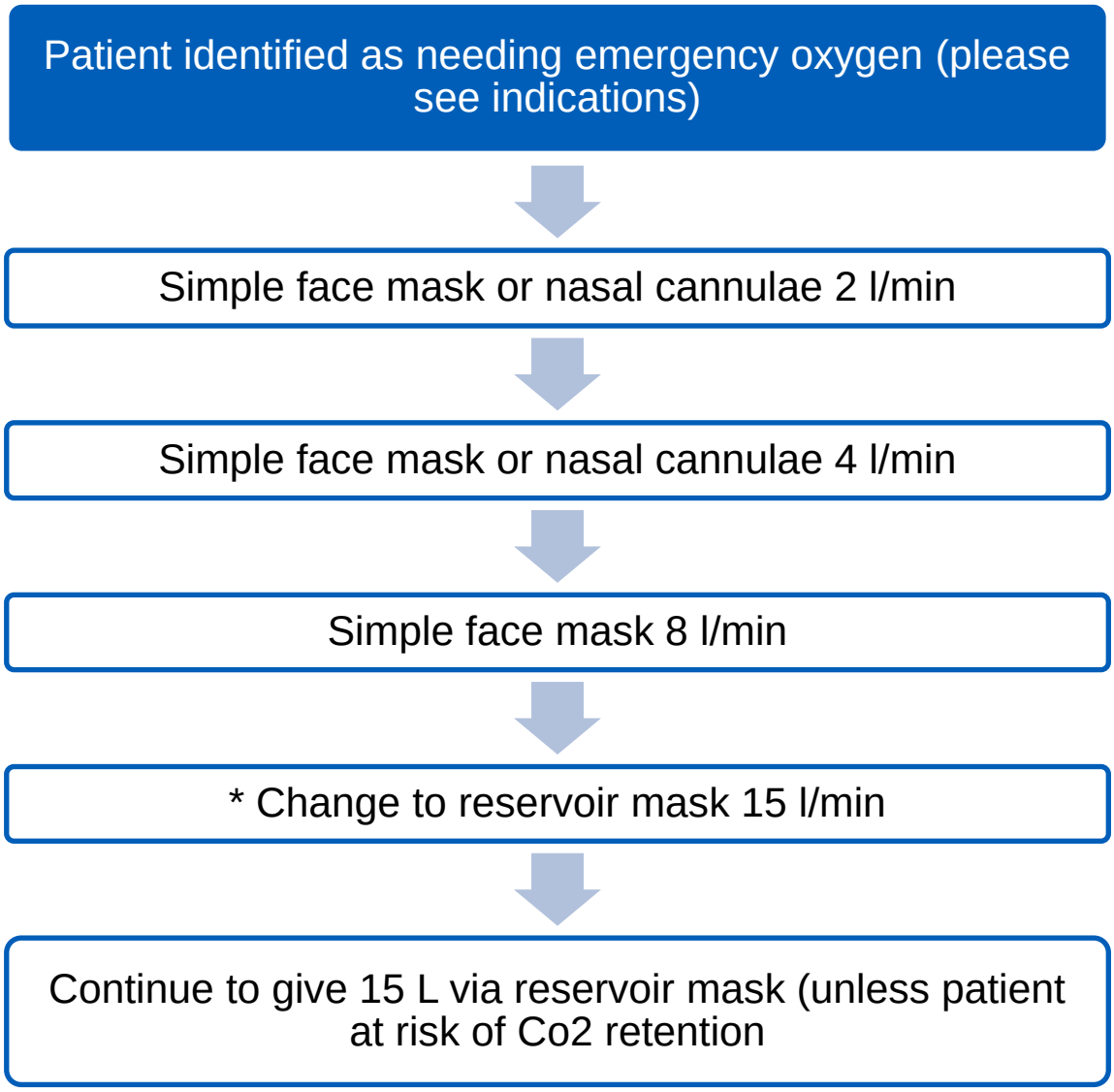
Signs of CO_2 retention are:

- 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.

Emergency oxygen treatment algorithm



The key aim is to maintain target sats at 94 to 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 may be more at risk of CO_2 retention (see above for signs).

Target saturations for people with COPD at risk of CO_2 retention are 88 to 92%.

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

It is recommended that all hot sites have one to two 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.

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.

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 one to two oxygen leads to support safe and effective use within primary care sites.

Helpful contact for Cornwall

Should the designated oxygen lead for your hot or cold site require assistance please contact:

- Air Liquide prescriber support team: call 0808 202 2099 or email alhomecare.hcpsupport@nhs.net

Patients with suspected or confirmed COVID-19 discharged from emergency departments and/or hospital wards who are for full active treatment (non-palliative)

Patients being discharged from the emergency department should have oxygen saturations greater than 94% on air (or 88% to 92% if at risk of type 2 respiratory failure) and be risk assessed and safety netted according to national and regional criteria. Patients who are acutely hypoxic should be admitted to hospital and therefore provision of oxygen therapy outside the acute setting should not be considered in this group.

Admitted patients may be considered safe to discharge from hospital if their hypoxia has improved, they are achieving stable oxygen saturations greater than 92% on air as part of an improving general clinical picture, and do not desaturate significantly on exertion. Therefore, provision of oxygen therapy (including ambulatory oxygen) outside the acute setting should not be considered in this group.

Inpatients who desaturate significantly on exertion should be investigated to identify and treat additional complications such as secondary infection or pulmonary

embolism. Patients admitted to hospital with coronavirus who also have chronic obstructive pulmonary disease (COPD), another long-term respiratory condition or identified and treated complications such as pulmonary embolism or pulmonary fibrosis may be considered for hospital discharge with home oxygen, if clinically appropriate, in which case BTS home oxygen and National Institute for Health and Care Excellence (NICE) COPD guidance should be followed.

An appropriately trained respiratory clinician and local HOSAR team must be involved where oxygen therapy is to be considered on discharge to ensure safe follow up and monitoring outside of hospital.

Patients with coronavirus being discharged from hospital to a step down or rehabilitation facility

Patients should be clinically stable, medically fit for transfer and have improved oxygen saturations to be eligible for safe step down from the acute setting and therefore provision of oxygen therapy should not generally be considered in this group. Individual patients who fulfil criteria for long term home oxygen therapy as described above should be assessed and prescribed home oxygen in line with BTS home oxygen and NICE COPD guidance. An appropriately trained respiratory clinician and local HOSAR team must be involved in the care and follow up of these patients.

Patients with suspected or confirmed coronavirus whose preferred place for treatment is within their home, or nursing home

There is no recommended emergency oxygen pathway for supporting and monitoring patients with coronavirus within their home, or within nursing or care home settings. Initiation of emergency oxygen therapy in this situation is not generally recommended. Care planning in these cases should be individualised and involve the patient, their family, their GP, and the local respiratory or HOSAR team, with expert support from palliative care or other specialists as appropriate, for example gerontology.

In the case of an individual patient who is acutely hypoxic due to coronavirus (saturations less than 90% on air) and whose preferred place of treatment is outside hospital, a senior decision maker such as a GP or palliative care physician may consider a trial of supported emergency home oxygen therapy. This can be arranged in one of two ways:

During working hours 9am to 5pm (Monday to Friday)

This should be discussed with the local HOSAR team to support with arranging oxygen and ongoing support through usual pathways.

Outside working hours (or weekends and bank holidays)

A responsible clinician (GP or palliative care clinician) is required to complete and submit a Part A home oxygen order form (HOOF A). Before prescribing emergency

oxygen and submitting the HOOF A, the responsible clinician must consider the likely prognosis, gain the patient's consent, and carry out a risk assessment to ensure that the patient and/or carers understand safety advice around the use of oxygen, including the dangers of smoking cigarettes and e-cigarettes near to oxygen equipment. If there is concern that safety advice will not be followed, oxygen should not be ordered.

The responsible clinician must document consent and risk assessment on the home oxygen consent form (HOCF) and initial home oxygen risk mitigation form (IHORM).

All forms can be accessed on the Air Liquide website.

A copy of the signed form should be stored in the patient's record. The patient's local HOSAR service must be notified of the decision to prescribe home oxygen as soon as possible within working hours so that they can support safe follow up. Patients in this situation will require close on-going clinical review and supportive care by a senior clinician.

Home oxygen prescription for patients with suspected or confirmed coronavirus

Any clinician prescribing home oxygen (including privately) for a patient must abide by the principles of good medical practice as they apply to the prescribing and managing of medicines. They must therefore:

- be aware that they are clinically responsible for the prescription and administration of this medical gas
- ensure that the prescription is safe, and evidence based, supported by a clearly documented clinical indication
- ensure that the prescription sets out the correct dose (flow rate) and duration of treatment
- document appropriate risk assessment and mitigation (such as around smoking and falls)
- document that they have given appropriate information to the patient, their carers and family about safe use of home oxygen, any potential adverse effects, likely duration of treatment, and arrangements for monitoring and follow up
- ensure that information about the patient's home oxygen therapy is shared with other professionals as appropriate such as community healthcare professionals, the local HOSAR service and the fire and rescue services
- demonstrate that they have appropriate and up to date training in home oxygen therapy and use

All clinicians are required to be familiar with General Medical Council (GMC) guidance on prescribing and managing medicines and devices and need to be aware that serious or persistent failure to follow this will put their registration at risk.

Patients with suspected or confirmed coronavirus at the end of life

For patients with coronavirus who are in the last days or hours of life, oxygen therapy is unlikely to be more effective than opioids and sedatives for the symptomatic management of breathlessness and associated distress. Oxygen therapy is likely to be burdensome in this situation, a barrier between family members and the patient, and a cause of additional anxiety related to equipment and deliveries. Measuring oxygen saturations in this setting is unlikely to be helpful. The focus of care should be on palliation using evidence-based pharmacological and non-pharmacological interventions, and individualised support to the person and those important to them.

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