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COVID19 Guidance: Clinical Advice

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KEY RECOMMENDATIONS

- The impact of the COVID-19 pandemic will put health and social care services across Scotland under unprecedented additional pressure and will require increased overall capability and capacity of the NHS in Scotland. **Every effort is being made to ensure that these are quickly put in place.**

- Scotland's Community Hubs and Assessment Centres will triage patients presenting with suspected COVID-19 to ensure that the best possible location of care is identified. It is vital they are adequately resourced and supported.

- Anticipatory care planning conversations should take place with those who are at higher risk from COVID-19.

- On admission to hospital all adults should be assessed for frailty, irrespective of COVID-19 status. It is recommended that the Clinical Frailty Score (CFS) is used as part of a general assessment that is recorded clearly.

- People with suspected or confirmed COVID-19 will require to be managed in single rooms, isolation rooms or cohorted areas.

- Staff caring for people with suspected or confirmed COVID 19 should use PPE according to the most up to date Health protection Scotland (HPS) advice.

- When people with suspected COVID-19 are admitted to hospital throat and nose swabs should be sent for PCR testing.

- If there is a high clinical suspicion of COVID-19, and negative initial tests, repeat sampling is required. If a patient has a productive cough then sputum should be sent for COVID-19 testing. **Under no circumstances should an induced sputum be performed.**

- Speciality teams should be encouraged to discuss treatment escalation and limitation plans (TELPS) with patients and/or their families at the earliest opportunity. Those identified as being likely to benefit from treatment escalation should be assessed by a member of the critical care team if their condition deteriorates.

- COVID-19 in the paediatric population is thought to cause mild disease. Children with symptoms suggestive of COVID-19 must follow standard referral pathways and be assessed through the Community Hubs and Assessment Centres.

- Pregnant women with suspected COVID 19 will require specialised advice and care in relation to coronavirus. NHS 24 will use the maternity pathway to triage pregnant women.

- Specific guidance has been developed to reduce distress for patients with COVID-19 who are approaching the end of life.

- The ethical advice and support framework should be considered together with the most current national decision-making and escalation guidance when making complex decisions.

- Staff are at high risk of emotional and physical fatigue. Physical and mental wellbeing of all staff should be supported

- It is important that given the rapidly evolving and unpredictable nature of the Covid19 pandemic, that this clinical guidance is reviewed in the current clinical and healthcare context. Clinical teams should ensure to keep up-to-date with the most recent national guidance.

1. Introduction

The impact of the COVID-19 pandemic will put health and social care services across Scotland under unprecedented additional strain. It has the potential to overwhelm these services and every effort is being made to ensure that this does not happen. The Scientific Advisory Group on Emergencies (SAGE) has proposed that pandemic suppression is the preferred strategy to prevent capacity within the UK healthcare systems being exceeded.

Having a robust community response to COVID-19 is vital to protect acute services. NHS Boards, in partnership with Community Services and Integration Authorities, have set up and resourced Community Hubs and assessment centres to manage patients presenting in the community. The effective resourcing and functioning of our community hubs is essential in our efforts to ensure that people can be treated in the right setting at the right time.

There are two parts to these new pathways: COVID-19 Hubs for telephone triage accessed through NHS24-111, and local COVID-19 Assessment Centres, where unwell patients needing to be seen are offered a face-to-face assessment to assess the need for treatment and/or admission. It is vital that we fully resource and support our community hubs to manage demand and capacity through our whole system approach to combating this disease.

1.1 Surge conditions

This pandemic may result in unprecedented numbers of critically ill patients. Surge capacity is the ability to manage a sudden influx of patients while surge capability is the ability to manage patients requiring very specialised medical care. When capacity and capability is outstripped by demand an extreme surge situation arises and an alternative model of healthcare delivery will be required, which requires thoughtful stewardship of available resources.

This COVID-19 outbreak has the very real potential to have an adverse impact on the capability and capacity of our health and care system. A high rate of staff absenteeism, which may reach as high as 40% of our workforce in some units at peak, will impact on delivery of healthcare. Our hospital and critical care facilities will be expanded to meet the increasing demand. However, it is recognised if capacity and capability is outstripped by demand,

resources will need to be managed differently and alternative healthcare delivery models may be necessary. The following strategies may be employed:

- Prioritisation of active treatment for those acutely ill from all conditions
- Redeployment of staff and resources to deliver maximum level of care service, potentially in non-standard acute settings;
- Curtailment and suspension of non-emergency work e.g. elective surgery
- Utilisation of primary and community care to reduce demand on acute care settings and support patients discharged to home or to the community

Focus on best practice, in alignment with the principles of Realistic Medicine should also continue for:

- Identification of those who will benefit from medical interventions;
- Provision of supportive or end of life care for all acutely ill patients, in whom extensive medical interventions are futile;
- Discussions with patients about their preferences in the event of becoming acutely unwell with COVID-19 or other illnesses;
- Ensuring cohesive working across health and social care in Scotland to reduce unwarranted variation in care.

Extreme surge would involve an unprecedented recalibration of normal clinical practice. The decision to invoke extreme surge would only be made if all capacity and capability within the health system, including additional capacity made available through the use of business continuity, mutual aid and surge plans, was exhausted. If this situation becomes inevitable, further guidance will be issued to help ensure we manage our resources to provide the best health outcomes possible. Specific tools to aid clinical decision making in such circumstances will be issued with legal and ethical guidance alongside advice from expert professional groups.

2. Scope

This guidance is intended to guide delivery of health and social care in Scotland in our communities, hospitals and critical care facilities during this COVID-19 pandemic. It is intended to be helpful to all staff working in these areas.

This guidance will be continuously monitored and updated as needed, as the trajectory of the pandemic in Scotland develops, and as new evidence and experience emerges. Healthcare services should ensure that they refer to the most up-to-date version of this guidance, which will be available on the Scottish Government Website. Every effort will be made to communicate changes to the guidance to all stakeholders in Scotland, and where necessary, complementary public information will be released.

While this document is issued by the Scottish Government and applies only in Scotland, it mirrors similar guidance from the the rest of the UK, and does not markedly deviate from the general principles contained therein.

3. Preparation

The principles of managing increased demand as a consequence of COVID-19 are to:

- Create resilient clinical pathways capable of meeting increased demand;
- Ensure equitable access to appropriate healthcare available;
- Provide a framework for clinical decision-making.

Collaboration between Scottish Government, Health and Social Care partnerships and NHS Boards will ensure that work continues in a coordinated manner to plan and deliver high quality and appropriate care for patients, wherever they are treated.

It is anticipated that there will be significant numbers of people requiring specialised treatment in secondary care, and , to ensure it is not overwhelmed, it will be important to identify patients who can best be cared for in the community by primary care and community services. In addition, given that more patients will be cared for in the community, Scottish Government, NHS Boards and Health and Care Partnerships must ensure that primary care

and community services are fully supported, and help manage the efficient flow of patients to secondary care when this is necessary.

4. Community Assessment & Referral to Secondary Care

NHS boards have established a network of COVID-19 Community Hubs and Assessment Centres across Scotland, which aim to provide a comprehensive and expansive front line community response to enable rapid pathways for those affected by COVID-19. The Hubs are not for direct face-to-face care, instead accepting calls from NHS 24 and other primary care providers. They are staffed by senior clinical decision makers who can triage incoming enquiries and decide on appropriate onward management. Some people will then require clinician assessment at COVID-19 assessment centres. These are staffed by nurses and a senior clinical decision maker. They are able to take context appropriate clinical observations, and then to refer on to secondary care or discharge patients back into the community.

The Community Hubs and Assessment Centres will triage patients presenting with suspected COVID-19 in the community to ensure that the best possible location of care is identified for these patients. In addition, the Hubs and Assessment centres will work collaboratively to ensure that hospitals are not overwhelmed with admissions that can be appropriately well cared for in the community.

Older adults and those living with pre-existing health conditions, such as diabetes, heart and lung disease, and severe frailty (e.g. CFS>7) are at higher risk of dying from infections and are particularly vulnerable to becoming seriously unwell from COVID-19. Where anticipatory care plans have already been made these should be followed. Due to visiting restrictions in hospital for patients diagnosed with COVID-19, it is important to discuss these issues with patients and their families in advance of admission to hospital, as this might not be possible if their clinical condition were to deteriorate rapidly.

A clinical assessment tool has been developed to support clinicians in selecting patients for assessment at hospital or management in the community. This can be printed off for use separately (Appendix 1)

5. Anticipatory Care Plans in COVID 19

Older adults and those living with pre-existing health conditions, such as diabetes, heart and lung disease, and frailty are at higher risk of dying from infections and are particularly vulnerable to becoming seriously unwell from COVID-19.

There is an opportunity for people to have conversations with carers and loved ones about the type of care that they would like to receive should they become unwell. This may be especially important at this time. We know that treatments for COVID-19 focus on supportive measures, and specific care options such as ventilation are of low benefit, or do not help people, who are already in poor health. However, there are many other aspects of care that can be discussed and planned. People may be worried about the future and so there is an opportunity to have a helpful conversation about what matters to them if they become seriously unwell.

These conversations can be extremely difficult to initiate; however, they are important and can be immensely helpful to patients and their families.

The aim is to have an open and honest conversation with patients and their families and carers so that future care can be planned in line with the patient's wishes. Depending on how the conversation progresses, consideration can be given to exploring other relevant aspects of anticipatory care planning (ACP). These anticipatory care planning discussions can be initiated by any member of staff, but efforts should be made where appropriate to communicate these discussions to the wider health and social care team involved in the care of the individual.

Decisions need to be documented and communicated with the GP practice so that they can be recorded in the patient's Key Information Summary (KIS), which is maintained by the GP.

Some people may not be ready for this conversation, and it may be necessary for you to try again at another time. Guidance and advice on anticipatory care planning can be accessed via the **Health Improvement Scotland iHub:**

A template to guide and document significant conversations for those most vulnerable to COVID 19 can be found in Appendix 2.

6. Hospital Admission and Management

The majority of patients with COVID-19 will be able to be managed at home. However, patients with suspected or confirmed COVID-19 may require admission to hospital either for management of respiratory failure because of infection, or because of another illness.

6.1 Assessment for Admission

On admission to hospital, all adults should be assessed for frailty, irrespective of COVID-19 status. It is recommended that the Clinical Frailty Score (CFS) is used as part of a general assessment and clinicians should have awareness of its limitations particularly in younger patients and those with long-term conditions or disabilities. Underlying comorbidities and health conditions should also be assessed. This should be documented in the clinical record.

6.2 Patient Placement

Patients with suspected or confirmed COVID-19 will require management in single rooms, isolation rooms or cohorted areas. Single/isolation rooms may be prioritised for patients with excessive cough/sputum production or those who will require aerosol generating procedures. In case of uncertainty, this should be discussed with the local infection control or the duty microbiologist/virologist.

6.3 Removal from Isolation

Patients may be considered for removal from isolation if:

- Patient has already been at home or in isolation for 7 days since onset of symptoms.
- Patient has been afebrile for 48 hours
- Patients symptoms are resolving or resolved (excluding cough)
- Patient has had two negative COVID-19 PCR combined throat/nose swab results 24 hours apart with the first repeat sample at least 7 days after the first positive test.

Please note that the above criteria is subject to change. Please refer to the Health Protection Scotland website for the most current guidance.

6.4 Transfer of patients

Transfer of patients with active COVID-19 between hospital sites should be avoided unless clinically indicated. Ideally, patients with suspected COVID-19 who are awaiting results should not be moved internally, within a hospital, unless the move is essential.

The decision to arrange such a move should be made by a consultant and should **not** be carried out until the COVID-19 test results are known. This is to allow a risk assessment to be carried out which in turn will facilitate safer transfer. A patient in isolation who does not meet criteria for de-escalation from isolation, but is being transferred to another ward, department or healthcare facility, should be discussed with the local Infection Prevention and Control Team.

Patients with COVID-19, who have not yet reached 7 days since symptom onset may still be infectious, so should be placed in a cohort of similar such recovering COVID-19 positive patients, or in a single room in the ward that is receiving them after transfer. They **must not** be placed in shared rooms with patients who are not known to have had COVID-19.

6.5 Personal Protective Equipment (PPE)

Staff caring for patients with suspected or confirmed COVID 19 or working within clinical areas where such patients may be treated should use PPE according to the most up to Health Protection Scotland (HPS) advice.

6.6 Clinical Management and Investigation

The common clinical features of COVID-19 include:

- fevers (temperature greater than 37.8C);
- coughing;
- shortness of breath or myalgia.

A small number of patients may present with gastrointestinal symptoms.

Clinicians should be alert to the possibility of atypical presentations of COVID-19, especially in patients who are immunocompromised. Please refer to the **Health Protection Scotland website** for the most current guidance on clinical management of COVID-19.

Clinicians must also remain alert to patients with acute medical problems that are not COVID-19, but whose presentation might be confused with this infection. This could lead to inappropriate management and deny patients best standard of care.

Investigations may demonstrate bilateral infiltrates on chest x-ray, or lymphopenia on full blood count. Biomarkers of severe infection that might indicate a worse prognosis are under intense investigation but no such marker is available at this time. It is important to note that troponins are commonly elevated in COVID-19, but in the absence of typical chest pain and ECG changes, are not on their own an indication of an acute coronary event, in this context.

Patients admitted to hospital where COVID-19 is suspected should have throat and nose swabs sent for PCR testing. The throat is swabbed first and then the nose. Swabs must be either the Virocult or Copan swabs for virology testing. Note that false negatives can occur with the PCR test, if swabs have been inappropriately or poorly taken. **A video of how to obtain throat/nose swabs can be viewed here:**

If there is a high clinical suspicion of COVID-19, and negative initial tests, repeat sampling is required. Deep respiratory samples (sputum/tracheal aspirate) have a higher sensitivity than nose/throat swabs, so if a patient has a productive cough then sputum should also be sent for COVID-19 testing. **Under no circumstances should an induced sputum be performed**.

All repeat tests should be discussed with virology and should be done at 48 hours post initial swab. If patients have convincing clinical features of COVID-19, but throat/nose swabs have tested negative by PCR, then it is appropriate to repeat the throat/nose swabs and re-test. Advice from virology and infectious diseases may be useful at this stage.

Patients may require management with supplemental oxygen. Antibiotics are not usually required unless there is evidence of a secondary bacterial infection. Focal chest x-ray changes,

neutrophilia or persistent fever may be signs of this, and if suspected, appropriate cultures should be sent.

Speciality teams should discuss treatment escalation and limitation plans (TELPS) with patients and/or their families at the earliest opportunity in case of an unexpected deterioration. This should include treatment plans for patients who would not wish or benefit from critical care admission and, where this is appropriate, documenting "Do Not Attempt Cardiopulmonary Resuscitation" (DNACPR) decisions.

At the earliest opportunity, a patient TELP should be put in place to establish the appropriate future pathway of care including whether referral to critical care will be of benefit. This should be recorded in the patient's medical record. An example TELP is in Appendix 3. All patients should have NEWS observations regularly documented. If patients who are for full escalation are deteriorating, then early referral to critical care should be made. Use of Continuous Positive Airways Pressure (CPAP) in a ward setting should only be initiated following discussion with critical care or a senior doctor.

7. Critical Care

Hospital and critical care facilities will be expanded to meet increased demand during this pandemic.

It is however recognised that maximal expansion may become overwhelmed if demand is greater than that which is predicted and decisions about the benefit of critical care admission are not carefully judged.

Depending on the circumstances and magnitude of the surge, the response may vary from a conventional response - where patients can be managed without significant alterations in usual processes, to a crisis response - where resource limitations require significant alterations in standards and processes of care to provide an appropriate level of care to the maximum number of patients.

7.1 Delivery of Critical Care during Surge Conditions

Surge conditions will necessitate expansion of critical care beds within individual health boards and hospitals, and local plans have been developed to increase critical care capacity guided by projected demand. This may involve expansion into non-critical care areas (e.g. ward areas, recovery areas, operating theatres), retrained or redeployed staff working under supervision, or use of equipment not usually used to deliver critical care e.g. anaesthetic machines.

Capacity in neighbouring hospitals and Boards should also be considered. Mutual aid agreements for transfer of patients, staff or equipment may be necessary. Data on the availability of critical care beds within and across organisations will be available to clinical and management teams using Ward Watcher™ software.

All critical care patients should be reviewed daily by appropriately trained medical staff and clear management plans made for the next 24 hours.

7.2 Critical Care Admission

Patients who have been identified as suitable for admission to critical care should be assessed by a member of the critical care team if their condition deteriorates. This should involve a full assessment including frailty, comorbidities, severity of acute illness, and the likelihood of critical care provision leading to survival with an acceptable quality of life.

If clinical assessment suggests the person has an increased degree of frailty (a CFS score of 5 or more), there is good evidence regarding the expected benefit of critical care organ support. In particular, studies from China, Italy and the UK suggest that people over the age of 70 who are admitted to ICU have a very high (greater than 70%) rate of death. This risk increases with advancing age. Significant cardiovascular, respiratory or other comorbidities confer an even higher likelihood of death, even with intensive care support. To ensure the optimal use of ICU resource, and that patients are not subjected to futile interventions of no benefit, a realistic assessment of outcomes for different treatment options must be communicated to patients, their families or carers in order to facilitate shared decision-making. Decision support tools (where available) may be useful to inform both patients and clinicians.

Speciality teams should be encouraged to discuss treatment escalation and limitation plans (TELPS) with patients and/or their families (see section 6.6)

Normal practice of shared decision-making informed by experience, evidence, available resources and patient views should be maintained where possible.

7.3 Extracorporeal Membrane Oxygenation (ECMO)

Referral for ECMO should be considered if:

- Patients have potentially reversible severe respiratory failure
- optimal conventional intensive care management has failed
- they meet the eligibility criteria for the respiratory ECMO service

Currently referral for ECMO should be made to **Glenfield Hospital Leicester** until 1st July 2020, after which date the Scottish ECMO unit at Aberdeen Royal Infirmary will be the point of contact. ECMO centres can advise intensive care clinicians on optimum management of severe acute respiratory failure.

7.4 Non-invasive ventilatory support

All forms of non-invasive ventilatory support are aerosol generating procedures and should only be carried out in an appropriate clinical area by trained staff wearing appropriate PPE.

7.4.1 Continuous Positive Airway Pressure (CPAP)

There is increasing evidence that there may be a role for CPAP in either preventing or delaying the need for mechanical ventilation in patients with respiratory failure due to COVID 19 infection. Use of CPAP must be under the direction of senior critical care or respiratory medicine clinicians.

7.4.2 High Flow Nasal Oxygen (HFNO)

HFNO is not currently recommended in COVID-19 patients based of lack on efficacy, risk to staff from aerosol generation and high oxygen consumption.

7.4.3 Non-invasive Ventilation (NIV)

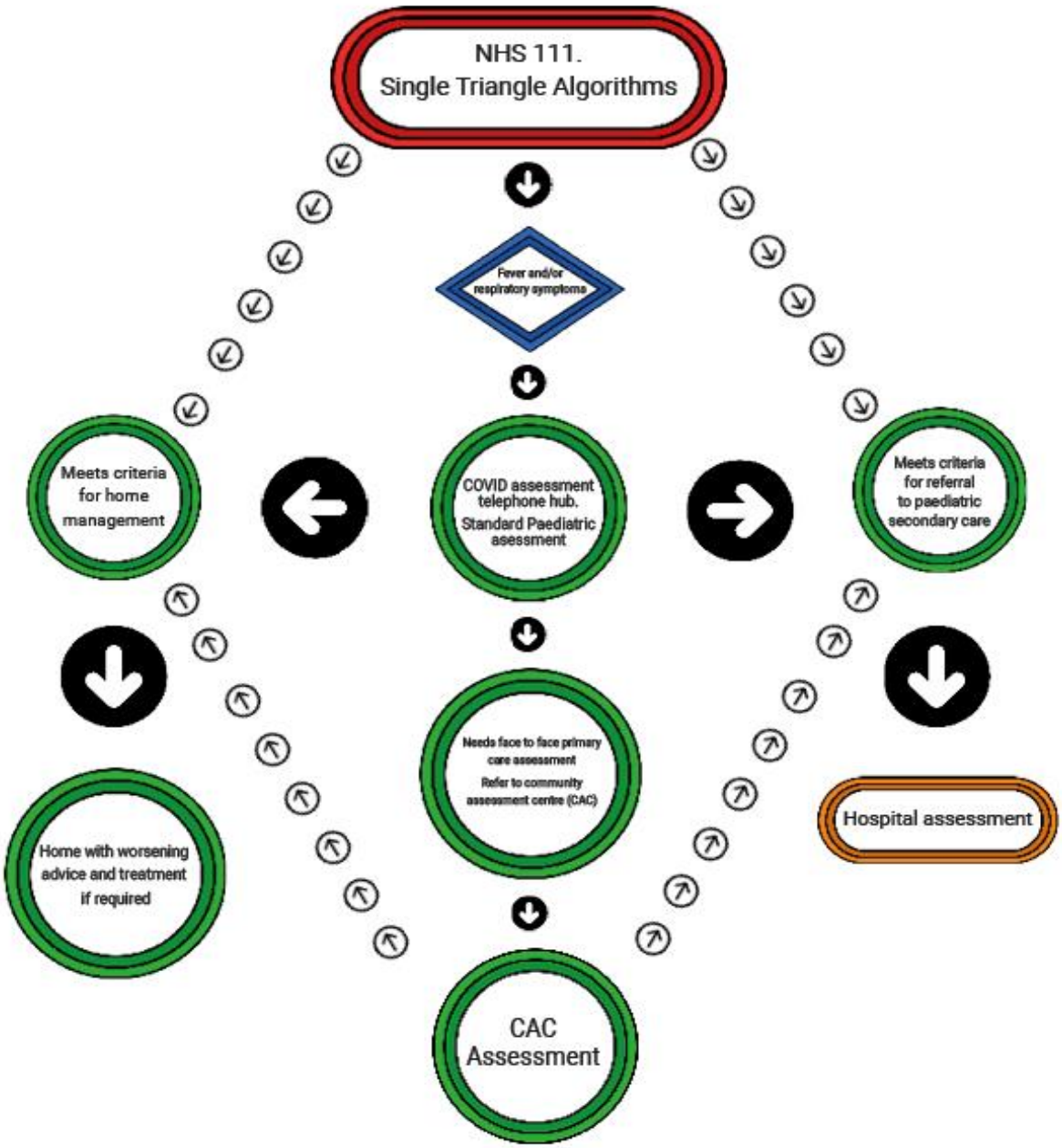
Non-invasive ventilation or BiPAP is not recommended for use in COVID-19 outwith standard indications i.e. acute on chronic hypercapnic respiratory failure.

8. Special Considerations

8.1 Paediatrics

Current understanding of COVID-19 in the paediatric population is that it is almost always a very mild disease. Nevertheless, it is important that when cases do arise, they are managed appropriately. This guidance is not intended to supplant individual decisions by responsible clinicians in paediatric practice. It is suggested that children with symptoms suggestive of COVID-19 follow standard referral pathways and are assessed as outlined in Figure 2 below.

Figure 2. Referral Guideline for Children and Young People



8.2 Obstetrics

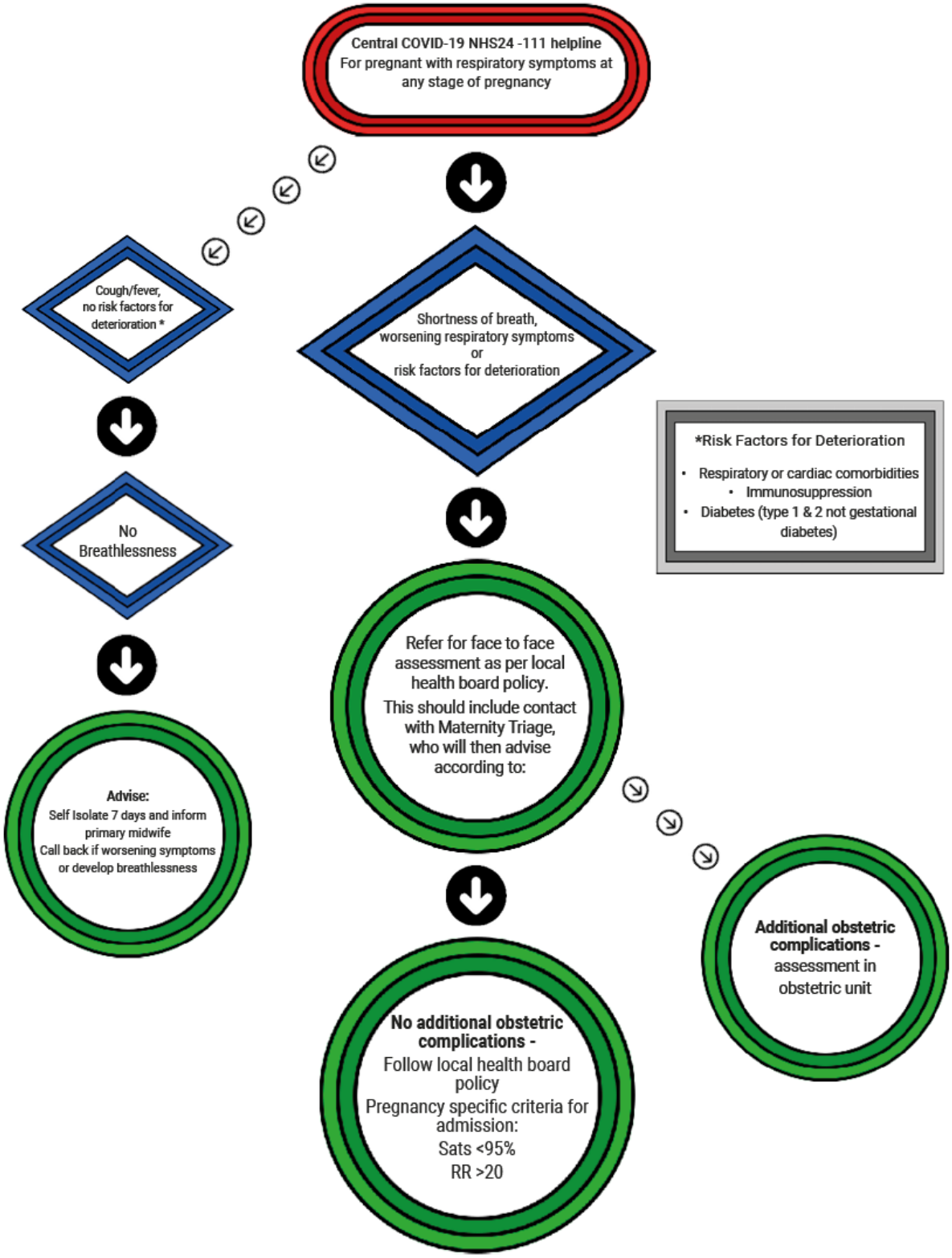
Pregnant women are at risk for COVID 19 in the same way as the rest of the population. Most pregnant women will already be under the care of maternity professionals. Maternity care operates at both community and acute levels, and occupies a distinct place in the healthcare landscape. Pregnant women will require specialised advice and care in relation to coronavirus because of the unique physiological changes of pregnancy.

NHS 24 will provide a single point of entry for all adults, including pregnant women, with respiratory symptoms via the national 111 phone line. NHS 24 will use the maternity pathway thereafter to triage pregnant women. The pathway depicted in figure 3 describes how to assess pregnant women to determine their route into care. In all cases, pregnant women experiencing symptoms indicative of COVID-19 should additionally be advised to inform their midwife as soon as possible, ahead of their next scheduled antenatal appointment. In all cases where symptomatic women are in labour or have an additional obstetric problem e.g. vaginal bleeding, they should be referred to their local maternity unit for combined assessment by an obstetrician and a physician, in an obstetric unit with isolation facilities.

Those with no obstetric issues but worsening respiratory symptoms, breathlessness or risk factors for deterioration should be assessed in person and in consultation with an obstetrician. **They should NOT be referred to the local COVID Hub**. Their point of assessment will be a secondary care setting and will be Board specific, either through a COVID-19 assessment centre or the local Maternity Triage unit. In either location, obstetric input must be available.

There are pregnancy specific respiratory symptom criteria for admission to secondary care, which reflect the differing physiology of pregnancy. ALL pregnant women assessed and/or admitted with respiratory symptoms must be seen or discussed with an obstetrician and have daily physician and obstetric review irrespective of location of their secondary care.

Figure 3. Assessment of pregnant patients with possible COVID19



9. End of Life Care

The focus of this section on end of life care is to reduce suffering for those rapidly dying from COVID-19 specifically. It is intended to be used to support professionals managing patients approaching the end of life in this context. **It does not replace existing local and Scottish guidelines for symptom management,** and advice should be sought from your **local palliative care team** should this be deemed necessary.

The clinical profile of dying from COVID-19 has been described as high breathlessness, high distress and delirium, high fever and rapid cessation of life over a short number of hours. In this context, specific guidance has been drawn up to enable confidence in higher starting doses and broader prescribing ranges in professionals caring for them in any setting.

The management options detailed in table 1 are indicated to reduce distress at point of imminent death and should only be used when reversible causes for deterioration have been addressed and there is consensus that the patient is dying.

Note that any syringe pump prescription should be reviewed regularly and may need titrated more than once in 24 hours to manage symptoms. Syringe pumps take at least 4 hours to reach full effect and this should be considered when initiating or changing doses. Early commencement of syringe pump, if available, is strongly recommended.

Route of delivery will depend on the individual clinical setting. Subcutaneous dosing is interchangeable with intravenous dosing where that route is available and more familiar.

Table 1: Management of symptoms when delivering end of life care in COVID-19

Breathlessness			
Medicine	**Route**	**Dose**	**Administration/comments**
Non-pharmacological measures to manage breathlessness should also be considered, these include positioning, relaxation techniques, wiping the face with cool wipes and menthol. **The use of fans is not recommended in the context of COVID-19**			
Morphine sulphate	Subcutaneous or slow intravenous injection	Start with 5 to 10mg every hour as required.	Consider using the higher dose if the patient is very distressed with breathlessness. Consider using lower doses in elderly patients. In patients who are already receiving regular opioid, use 1/6 of total daily subcutaneous opioid dose for as required dose.
	Subcutaneous infusion	Start with 10 to 20mg over 24h.	
If the patient has known renal impairment (eGFR <30), consider using equivalent doses of oxycodone/alfentanil as required and alfentanil/oxycodone in an infusion. See www.palliativecareguidelines.scot.nhs.uk for conversions			
Midazolam	Subcutaneous or slow intravenous injection	Start with 5 to 10mg every hour as required.	Consider using the higher dose if the patient is very distressed with breathlessness. Consider using lower doses in elderly patients. Maximum dose 80mg over 24h.
	Subcutaneous infusion	Start with 10 to 20mg over 24h.	

Patients who are receiving medication via nebulisers may continue to do so in the context of COVID-19. Corticosteroids are not thought to be helpful in managing breathlessness due to COVID-19 at end of life. Consider whether the patient is benefiting symptomatically from **any** oxygen prescribed, or if medications alone can provide sufficient symptom control. Consider discontinuing oxygen where possible and appropriate.

Cough			
Codeine linctus	Oral	30 to 60mg every 6 hours as required	
Morphine sulphate	Oral	5 to 10mg every hour as required	Consider using the higher dose if the patient is very distressed with cough. Consider using lower doses in elderly patients. In patients who are already receiving regular opioid, use 1/6 of total daily opioid dose for as required dose.
	Subcutaneous injection	5mg every hour as required	
	Subcutaneous infusion	15 to 20mg over 24h	

If the patient has known renal impairment (eGFR <30), consider using equivalent doses of oxycodone/alfentanil as required and alfentanil/oxycodone in an infusion. See www.palliativecareguidelines.scot.nhs.uk for conversions

Respiratory Secretions			
Hyoscine Butylbromide	Subcutaneous injection	20mg every hour as required	Remember alternative antisecretory drugs are available – see www.palliativecareguidelines.scot.nhs.uk Alternative routes of administration are also available – see…
	Subcutaneous infusion	Up to 180mg over 24h	

Suction is not recommended in the context of COVID-19 as this is an aerosol generating procedure and requires full PPE including FFP3 mask.

Delirium / Terminal agitation / Terminal restlessness			
Midazolam	Subcutaneous injection	5 to 10mg every hour as required	Maximum dose 80mg over 24h Better for agitation due to distress and anxiety Consider using lower doses in elderly patients.
	Subcutaneous infusion	Start with 10 to 20mg over 24h	
Levomepromazine	Subcutaneous injection	Start with 10 to 25mg every hour as required	High doses may be required in patients who have severe agitation. Maximum total daily dose 300mg/day. Better for agitation due to delirium Consider using lower doses in elderly patients.
	Subcutaneous infusion	Start with 50mg over 24h (can be given as bd injections)	
Haloperidol	Subcutaneous injection	500 micrograms every 2 hours as required.	Maximum 3mg/24h
Remember to consider non-pharmacological interventions for delirium in addition to using drugs where required. If the patient remains agitated, please contact your local palliative care team for further advice.			

Pyrexia			
Paracetamol	Rectal	1g every 4 to 6 hours maximum 4g per day	Use 500mg dose if -Weight <50kg -if hepatic impairment -if eGFR<30ml/min. - if history of alcohol excess
Diclofenac	Rectal	75mg to 150mg daily in divided doses	
	Subcutaneous injection	50mg every 8 hours as required	
	Subcutaneous infusion	150mg over 24h	
Ketorolac	Subcutaneous infusion	60mg over 24h	
	Subcutaneous injection	15mg every 8 hours as required	
NSAIDs should be used with caution in patients who may have COVID-19, however if the patient is in the last days of life their use may be appropriate. https://www.gov.uk/government/news/ibuprofen-use-and-covid19coronavirus			
Remember non-pharmacological measures such as reducing room temperature, removing excess bedding, and cooling forehead with tepid sponging.			
Pain			
Pain is not a prominent feature of COVID-19. Paracetamol (as above) may be adequate analgesia in addition to the above medications for other symptoms. If this is not the case, refer to www.palliativecareguidelines.scot.nhs.uk for advice.			

10. Ethical Considerations

Ethical advice and support will not be needed in most cases as clinicians will be able to apply their knowledge and experience as well as refer to clear national guidance. The COVID-19 pandemic however may result in changes to healthcare scope and delivery across the UK, for all patients.

A distinct framework on ethical advice and support has been developed by the Chief Medical Officer Directorate, to support decision-making. The ethical advice and support framework should be considered together with the most current national decision-making and escalation guidance, which will be available on the Scottish Government website.

Clinical decisions should continue to be guided by the principles of GMC Good Medical Practice and available evidence. Clinical teams have responsibility for decisions about their patients. In the small number of situations beyond the scope of guidance or the experience of clinical teams, ethical advice and support must be available to aid decisions at all levels including individual, group or population level.

To this effect, ethical advice and support groups will be established as a priority in each Health Board in Scotland to deliver useful, timely and pragmatic ethical support for complex or difficult cases. In addition, a national ethical advice and support group will be established to offer advice and support to local groups, as well as to consider national ethical issues and offer advice.

Clinicians should be assured that decisions taken in good faith, in accordance with national actions to counter COVID-19, will not be held against them.

11. Workforce Considerations

Staff across health and social care in Scotland are likely to come under unprecedented pressures due to increased clinical workload and staff absence caused by illness. This may necessitate changes in the scope and boundaries of health professionals' practice.

Staff should be supported to work within their frame of competence and experience, but may have to work outside their usual teams and hierarchies. **Staff should be reassured that regulators such as the General Medical Council and the Nursing and Midwifery Council have recognised that in highly challenging circumstances, professionals may need to**

depart from established procedures in order to care for patients in health and social care services.

Both new and existing staff are at high risk of emotional and physical fatigue. Local management teams must ensure the physical and mental wellbeing of all staff, focusing on emotional support, nutrition, hydration and sleep, with clear signposting made available further resources. Leaders across all health and social care sectors should aspire to lead with compassion and kindness during this unprecedented crisis. NHS Boards and health and social care partnerships should consider how they can support their staff working in challenging circumstances and unfamiliar environments.

Useful Resources

1. NHS England Extreme Surge Guidance, NHS England and Improvement, UK (publication pending)

2. NICE. COVID-19 rapid guideline: critical care. NICE guideline [NG159]. March 2020. www.nice.org.uk/guidance/ng159

3. Taylor B, Kemp V, Goldhill D, Waldmann C. Critical Care Contingency Planning: Phased Responses and Triaging Framework. J Intensive Care Soc. 2008;9(1):16–9

4. Christian MD, Sprung CL, King MA, Dichter JR, Kissoon N, Devereaux A V., et al. Triage: Care of the critically ill and injured during pandemics and disasters: CHEST consensus statement. Chest. 2014;146: e61S-e74S

5. Christian MD, Hawryluck L, Wax RS, Cook T, Lazar NM, Herridge MS, et al. Development of a triage protocol for critical care during an influenza pandemic. Cmaj. 2006;175(11):1377–81

6. Murthy, Srinivas, Charles D. Gomersall, and Robert A. Fowler. Care for critically ill patients with COVID-19. Jama.2020

7. COVID-19 Guidance: Ethical Advice and Support Framework, UK (publication pending)

8. Health Protection Scotland. COVID-19 Guidance. https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/

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10. Centre for Disease Control. Morbidity and Mortality Weekly Report. Preliminary Estimates of the Prevalence of Selected Underlying Health Conditions Among Patients with Coronavirus Disease 2019 USA. March 2020. https://www.cdc.gov/mmwr/volumes/69/wr/mm6913e2.htm?s_cid=mm6913e2_w

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This Guidance has been produced on behalf of the Scottish Government's Chief Medical Officer

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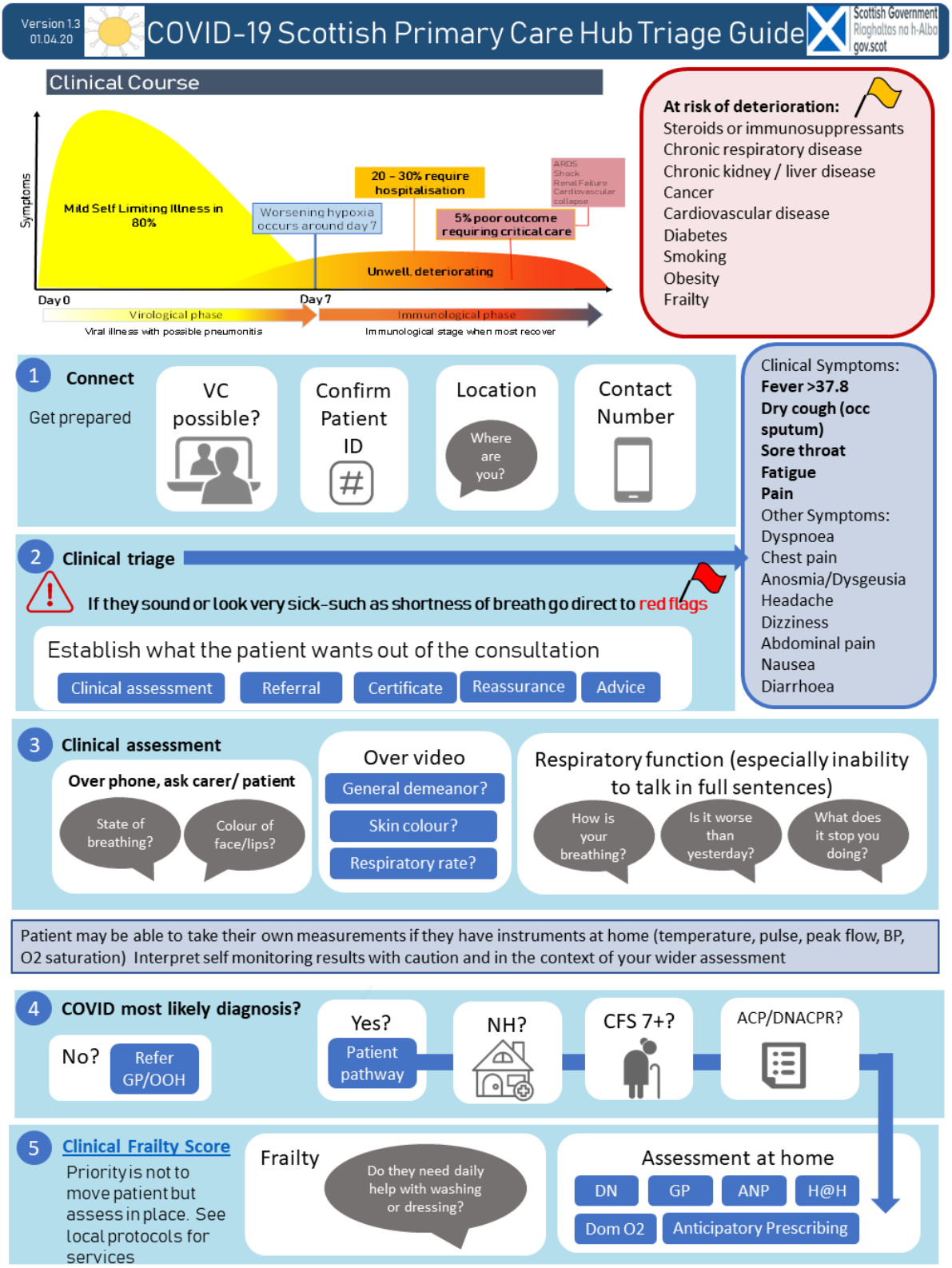
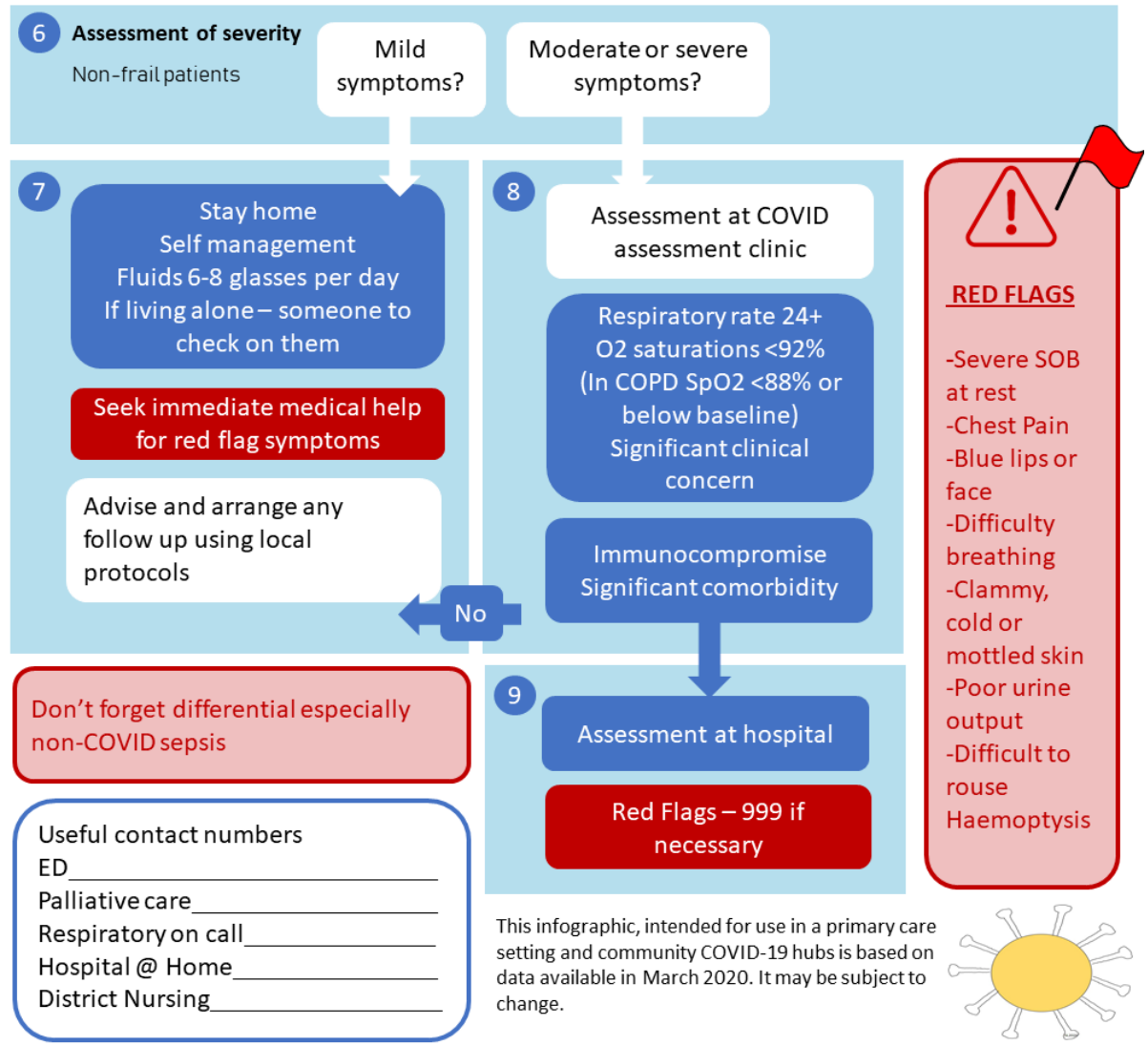
Appendix 1: Clinical assessment tool for assessment at hospital or community management (two pages)

Note: A downloadable version with working hyperlinks is available at the Scootish Government Website (insert hyperlink)





Additional Resources

[Primary Care Resus Guidelines]

[BMJ Primary Care Guidance]

[Health Protection Scotland – COVID-19 Guidance for Primary Care]

[Health Protection Scotland – Literature Review for COVID-19]

For [pregnancy] and [paediatrics] guidelines (see national clinical advice guidance)

[NHS Inform]

This has been adapted by Dr Stefanie Lip, Dr Erica Peters, Dr Michelle Watts, Dr Beth White, Dr Dan Beckett, Prof Graham Ellis from: Greenhalgh T, Koh G. Covid-19: a remote assessment in primary care. BMJ 2020;368:m1182

Disclaimer: This infographic is not a validated clinical decision aid.

COVID-19 Scottish Primary Care Hub Triage Guide

Scottish Government
Riaghaltas na h-Alba
gov.scot

Appendix 2: Anticipatory Care Planning Template for Use in COVID-19 Pandemic

If you were to become seriously unwell due to an infection such as the coronavirus, how would you like to be cared for?

Specific care options e.g. ventilation in intensive care may not be available or appropriate. You may wish to explore comfort options such as symptom control as a priority.
You may find it helpful to:
- ask a question then pause, listen and go where the conversation takes you
- explore any preferences, hopes or fears that are raised
- enquire about alternative treatment options. If there is a preference for intensive hospital treatment and ventilation, ask 'What if that was not appropriate or available'?
- ask what things would be important to them if they were more seriously unwell and unlikely to recover

The things you would like: **The things you do not want:**
Your preferred place of care:
Any other information:
Discussions about cardiopulmonary resuscitation:
Do you currently have a DNACPR form completed? Yes ☐ No ☐

Who would you like to be involved in future decisions about your care?

Ask: 'If you become more unwell it is helpful to know who are the people that are important to you, and that you would like to have involved in decisions about your care. For example, power of attorney or a relative.'

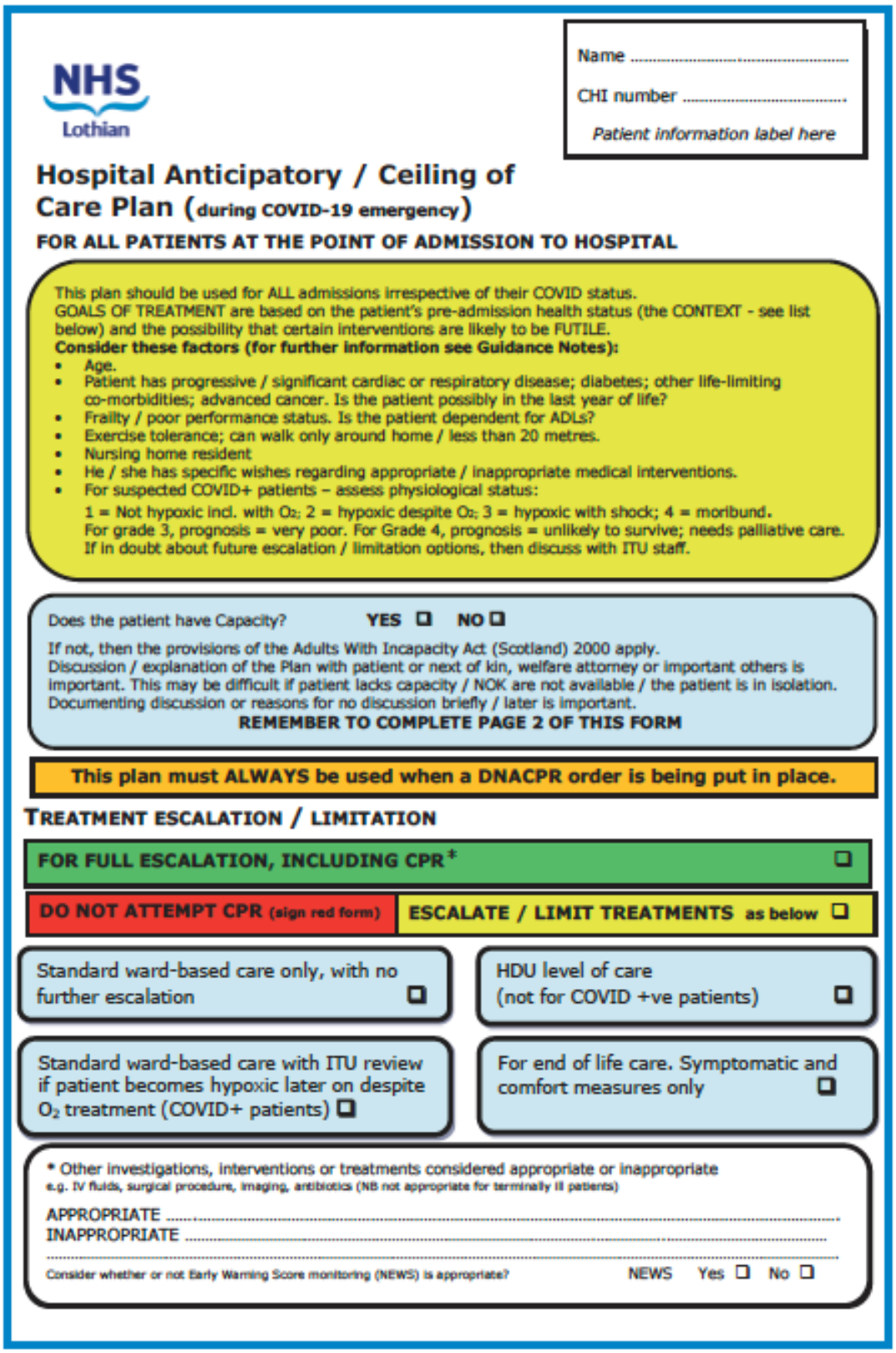
Key people you would like to be involved in decisions about your care. Please include names and contact information. **Do any of these people have power of attorney or welfare guardianship?** YES ☐ NO ☐ **If so, what are their names?**
Other important contacts (next of kin / carer / neighbour):
Key worker (social / health care worker)

Sharing your information

Explain that it is helpful to let your GP practice know this information, as they can update a key information summary so that emergency care providers can see your wishes.

There is agreement that this information can be added to the Key Information Summary (KIS) Yes ☐ No ☐ **Person completing this form:** **Name:** **Designation:** **Date:**

Appendix 3: Template Treatment Escalation and Limitation Plan



NHS Lothian

Name .....

CHI number .....

Patient information label here

Hospital Anticipatory / Ceiling of Care Plan (during COVID-19 emergency)

FOR ALL PATIENTS AT THE POINT OF ADMISSION TO HOSPITAL

This plan should be used for ALL admissions irrespective of their COVID status.
GOALS OF TREATMENT are based on the patient's pre-admission health status (the CONTEXT - see list below) and the possibility that certain interventions are likely to be FUTILE.
Consider these factors (for further information see Guidance Notes):

- Age.
- Patient has progressive / significant cardiac or respiratory disease; diabetes; other life-limiting co-morbidities; advanced cancer. Is the patient possibly in the last year of life?
- Frailty / poor performance status. Is the patient dependent for ADLs?
- Exercise tolerance; can walk only around home / less than 20 metres.
- Nursing home resident
- He / she has specific wishes regarding appropriate / inappropriate medical interventions.
- For suspected COVID+ patients – assess physiological status:
  1 = Not hypoxic incl. with O_2; 2 = hypoxic despite O_2; 3 = hypoxic with shock; 4 = moribund.
  For grade 3, prognosis = very poor. For Grade 4, prognosis = unlikely to survive; needs palliative care.
  If in doubt about future escalation / limitation options, then discuss with ITU staff.

Does the patient have Capacity? **YES** ☐ **NO** ☐

If not, then the provisions of the Adults With Incapacity Act (Scotland) 2000 apply.
Discussion / explanation of the Plan with patient or next of kin, welfare attorney or important others is important. This may be difficult if patient lacks capacity / NOK are not available / the patient is in isolation.
Documenting discussion or reasons for no discussion briefly / later is important.

REMEMBER TO COMPLETE PAGE 2 OF THIS FORM

This plan must ALWAYS be used when a DNACPR order is being put in place.

TREATMENT ESCALATION / LIMITATION

FOR FULL ESCALATION, INCLUDING CPR* ☐

DO NOT ATTEMPT CPR (sign red form) | **ESCALATE / LIMIT TREATMENTS** as below ☐

Standard ward-based care only, with no further escalation ☐

HDU level of care (not for COVID +ve patients) ☐

Standard ward-based care with ITU review if patient becomes hypoxic later on despite O_2 treatment (COVID+ patients) ☐

For end of life care. Symptomatic and comfort measures only ☐

* Other investigations, interventions or treatments considered appropriate or inappropriate
e.g. IV fluids, surgical procedure, imaging, antibiotics (NB not appropriate for terminally ill patients)

APPROPRIATE .....
INAPPROPRIATE .....
.....

Consider whether or not Early Warning Score monitoring (NEWS) is appropriate? NEWS Yes ☐ No ☐