PRACTICE

GUIDELINES

Managing COVID-19 symptoms (including at the end of life) in the community: summary of NICE guidelines

National Institute for Health and Care Excellence (NICE) in collaboration with NHS England and NHS Improvement

> ### What you need to know
>
> - Put treatment escalation plans in place for patients with COVID-19 because they may deteriorate rapidly and need urgent hospital admission
> - Encourage patients with cough to avoid lying on their back and, for those with a cough that is distressing, to consider short term use of codeine linctus, codeine phosphate tablets, or morphine sulfate oral solution
> - Controlled breathing techniques include positioning, pursed-lip breathing, breathing exercises, and coordinated breathing training

Although much focus has been on assessing the severity of COVID-19, general practitioners and other community based clinicians also need a working knowledge of symptom management. Symptoms of cough, fever, and breathlessness can be highly distressing even in those who do not have severe disease. Also, treatments for symptoms in severe COVID-19 will be needed for patients whose advance care plan or advance decision to refuse treatment includes a decision not to escalate treatment beyond home based care.

This article summarises key points from the National Institute for Health and Care Excellence (NICE) COVID-19 rapid guideline on managing symptoms (including at the end of life) in the community.[1] The guideline is part of a series of rapid guidelines on COVID-19, developed in collaboration with NHS England and NHS Improvement using interim process and methods.[2] Recommendations are based on evidence and expert opinion, and have been verified as far as possible by NICE.

> ### How this guideline summary was prepared
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> This summary is based on the version of the guidance published on 3 April 2020 and has been prepared by *The BMJ's* clinical editors. Readers should refer to the full guideline on the NICE website for the latest version of the guidance (https://www.nice.org.uk/guidance/ng163) because recommendations will be reviewed and updated by NICE as the knowledge base and expert experience develops.
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> Please see the NICE coronavirus page (https://www.nice.org.uk/covid-19) for additional NICE rapid guidelines on COVID-19.

Recommendations

Communicating with patients and minimising risk

- For patients with COVID-19 symptoms, explain:

  - That the key symptoms are cough, fever, breathlessness, anxiety, delirium, and agitation, but they may also have fatigue, muscle aches, and headache
  - That they and people caring for them should follow the UK guidance on self-isolation[3] and the UK guidance on protecting vulnerable people[4]
  - That if the symptoms are mild they are likely to feel much better in a week
  - Who to contact if their symptoms get worse, such as NHS 111 online.
- Minimise face-to-face contact by:
  - Offering telephone or video consultations[5]
  - Cutting non-essential face-to-face follow up
  - Using electronic prescriptions rather than paper
  - Using different methods to deliver medicines to patients, for example, pharmacy deliveries, postal services, NHS volunteers, or introducing drive-through pick-up points for medicines.

Treatment and care planning

- 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.
- Put treatment escalation plans in place because patients with COVID-19 may deteriorate rapidly and need urgent hospital admission.
- For patients with pre-existing advanced comorbidities, find out if they have advance care plans or advance decisions to refuse treatment, including do not attempt resuscitation decisions. Document this clearly and take account of these in planning care.

Managing cough

- Be aware that older patients or those with comorbidities, frailty, impaired immunity, or a reduced ability to cough and clear secretions are more likely to develop severe pneumonia. This could lead to respiratory failure and death.

- If possible, encourage patients with cough to avoid lying on their back because this makes coughing ineffective.

- Use simple measures first, including getting patients with cough to take honey (for patients aged over 1 year). See table 1 for treatments for managing cough.

- For patients with COVID-19, consider short term use of codeine linctus, codeine phosphate tablets, or morphine sulfate oral solution to suppress coughing if it is distressing.

Managing fever

- Be aware that, on average, fever is most common five days after exposure to the infection.

- Advise patients to drink fluids regularly to avoid dehydration (no more than 2 litres per day).

- Do not use antipyretics with the sole aim of reducing body temperature.

- Advise patients to take paracetamol if they have fever and other symptoms that antipyretics would help treat. Tell them to continue only while the symptoms of fever and the other symptoms are present. Until there is more evidence, paracetamol is preferred to non-steroidal anti-inflammatory drugs (NSAIDs) for patients with COVID-19.

Managing breathlessness

The guidance offers a range of techniques to help manage breathlessness (box 1) and encourages clinicians to be aware that severe breathlessness often causes anxiety, which can then increase breathlessness further.

Box 1: Techniques to help manage breathlessness

- Controlled breathing techniques include positioning, pursed-lip breathing, breathing exercises, and coordinated breathing training.

- In pursed-lip breathing, people inhale through their nose for several seconds with their mouth closed, then exhale slowly through pursed lips for 4-6 seconds. This can help to relieve the perception of breathlessness during exercise or when it is triggered.

- Relaxing and dropping the shoulders reduces the hunched posture that comes with anxiety.

- Sitting upright increases peak ventilation and reduces airway obstruction.

- Leaning forward with arms bracing a chair or knees and the upper body supported has been shown to improve ventilatory capacity.

- Breathing retraining aims to help a person regain a sense of control and improve respiratory muscle strength. Physiotherapists and clinical nurse specialists can help patients learn how to do this (bearing in mind that this support may need to be done remotely).

For patients with COVID-19 who are at the end of life and have moderate to severe breathlessness and are distressed, consider concomitant use of an antiemetic and a regular stimulant laxative (box 2). Note that opioids and benzodiazepines do not currently have a UK marketing authorisation for moderate to severe breathlessness.

Box 2: End-of-life treatments for managing breathlessness in patients aged 18 years and over. (Check the online NICE guidelines for the most up-to-date advice before prescribing)

Opioid naive (not currently taking opioids) and able to swallow

Oral treatment:

- Morphine sulfate immediate-release 2.5-5 mg every 2-4 hours as required *or*

- Morphine sulfate modified-release 5 mg twice a day, increased as necessary (maximum 30 mg daily)

Already taking regular opioids for other reasons (such as pain relief)

Oral treatment:

- Morphine sulfate immediate-release 5-10 mg every 2-4 hours as required *or*

- One twelfth of the 24 hour dose for pain, *whichever is greater*

Unable to swallow

Parenteral treatment:

- Morphine sulfate 1-2 mg subcutaneously every 2-4 hours as required, increasing the dose as necessary

- If needed frequently (more than twice daily), a subcutaneous infusion via a syringe driver may be considered (if available), starting with morphine sulfate 10 mg over 24 hours

Special considerations

- If breathlessness is not continuous, intermittent opioid dosing may be appropriate

- If estimated glomerular filtration rate (eGFR) is <30 mL per minute, use equivalent doses of oxycodone instead of morphine sulfate

- Consider concomitant use of an antiemetic (such as haloperidol) and a regular stimulant laxative (such as senna)

- Continue with non-pharmacological strategies for managing breathlessness when starting an opioid

- Opioid patches should not routinely be used in patients who are opioid naive because of the time it takes for the medicine to get to steady state for clinical effect and the high morphine equivalence (see "Prescribing in palliative care" in the *BNF* for more details[6])

Add a benzodiazepine if required

- For breathlessness and anxiety, use lorazepam 0.5 mg sublingually when required (maximum 4 mg daily)

- Reduce the dose to 0.25-0.5 mg in elderly or debilitated patients (maximum 2 mg in 24 hours)

- For associated agitation or distress, use midazolam 2.5-5 mg subcutaneously when required (see *BNF* for more details on dose[6])

- Sedation and opioid use should not be withheld because of fear of causing respiratory depression

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Managing anxiety, delirium, and agitation

- Address reversible causes of anxiety, delirium, and agitation first by:

  - Exploring the patient's concerns and anxieties

  - Ensuring effective communication and orientation (for example, explaining where the person is, who they are, and what your role is)

  - Ensuring adequate lighting

  - Explaining to those providing care how they can help.

- Treat reversible causes of anxiety or delirium, with or without agitation, for example, hypoxia, urinary retention, and constipation.

- Consider trying a benzodiazepine to manage anxiety or agitation (see box 3)

Box 3: Treatments for managing anxiety, delirium and agitation in patients aged 18 years and over. (Check the online NICE guidelines for the most up-to-date advice before prescribing)

Anxiety or agitation, able to swallow

- Lorazepam 0.5-1 mg orally four times a day as required (maximum 4 mg in 24 hours)
- Reduce the dose to 0.25-0.5 mg in elderly or debilitated patients (maximum 2 mg in 24 hours)
- Oral tablets can be used sublingually (off-label use)

Anxiety or agitation, unable to swallow

- Midazolam 2.5-5 mg subcutaneously every 2-4 hours as required
- If needed frequently (more than twice daily), a subcutaneous infusion via a syringe driver may be considered (if available) starting with midazolam 10 mg over 24 hours
- Reduce dose to 5 mg over 24 hours if estimated glomerular filtration rate (eGFR) is <30 mL per minute

Delirium, able to swallow

- Haloperidol 0.5-1 mg orally at night and every 2 hours when required
- Increase dose in 0.5-1 mg increments as required (maximum 10 mg daily, or 5 mg daily in elderly patients)
- The same dose of haloperidol may be administered subcutaneously as required rather than orally, or a subcutaneous infusion of 2.5-10 mg over 24 hours
- Consider a higher starting oral dose (1.5-3 mg) if the patient is severely distressed or causing immediate danger to others
- Consider adding a benzodiazepine such as lorazepam or midazolam if the patient remains agitated (see doses above)

Delirium, unable to swallow

- Levomepromazine 12.5-25 mg subcutaneously as a starting dose and then hourly as required (use 6.25-12.5 mg in elderly patients)
- Maintain with subcutaneous infusion of 50-200 mg over 24 hours, increased according to response (doses >100 mg over 24 hours should be given under specialist supervision)
- Consider midazolam alone or in combination with levomepromazine if the patient also has anxiety (see doses above)

Guidelines into practice

- How would you provide written information about self management and breathing techniques to a patient with COVID-19 whom you have assessed remotely?
- How do you ensure that a treatment escalation plan is discussed and documented with patients and their carers, and made available to other healthcare providers?

How patients were involved in the creation of this article

The NICE rapid guideline process included "targeted peer review" involving patient groups.

Provenance and peer review: Commissioned; not externally peer reviewed.

1. National Institute for Health and Care Excellence. COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community (NICE guideline NG163). 2020. https://www.nice.org.uk/guidance/ng163.
2. National Institute for Health and Care Excellence. Interim process and methods for developing rapid guidelines on COVID-19 (process and methods PMG35). 2020. https://www.nice.org.uk/process/pmg35/chapter/scoping.
3. NHS. Self-isolation if you or someone you live with has symptoms: Coronavirus (COVID-19). https://www.nhs.uk/conditions/coronavirus-covid-19/self-isolation-advice/.
4. Public Health England. COVID-19: guidance on shielding and protecting people defined on medical grounds as extremely vulnerable. https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19.
5. Greenhalgh T, Koh GCH, Car J. Covid-19: a remote assessment in primary care. *BMJ* 2020;368:m1182. 10.1136/bmj.m1182 32213507
6. BNF. Prescribing in palliative care. https://bnf.nice.org.uk/guidance/prescribing-in-palliative-care.html.

Table

Table 1| **Treatments for managing cough in adults aged 18 years and over. (Check the online NICE guidelines for the most up-to-date advice before prescribing)**

Treatment	Dose*
Initial management	
Use simple non-drug measures such as taking honey	A teaspoon of honey
First choice, only if cough is distressing†	
Codeine linctus (15 mg/5 mL) or codeine phosphate tablets (15 mg, 30 mg)	15-30 mg every 4 hours as required, up to four doses in 24 hours
	If necessary, increase dose to a maximum of 30-60 mg four times a day (maximum 240 mg in 24 hours)
Second choice, only if cough is distressing†	
Morphine sulfate oral solution (10 mg/5 mL)	2.5-5 mg when required every 4 hours
	Increase up to 5-10 mg every 4 hours as required
	If the patient is already taking regular morphine, increase the regular dose by a third

* All doses are for oral administration.

† Avoid cough suppressants in chronic bronchitis and bronchiectasis because they can cause sputum retention.