Context and use of this document:
- This guide supplements the Symptom Management Guidelines in the CARE DECISIONS document to support the care of adult patients with Covid-19 infection who require palliative management of their condition.
- NB These are All Wales pragmatic prescribing suggestion in response to the pandemic.

Symptoms of Covid-19 infections
The symptoms most commonly experienced by patients as a result of Covid-19 infection are:

- **Breathlessness / Dyspnoea**
- **Agitation**
- **Anxiety**

In addition, other pre-existing conditions may need to be considered when assessing patients’ needs e.g. management of pain and nausea. Delirium has also been reported as a feature with Covid-19. See Care Decisions Symptom Control guidance for management of other symptoms. Specific advice on possible Covid-19 conditions is shown below.

**Breathlessness - Use of Opioids:**
There is good evidence that opioids reduce breathlessness in cancer and non-cancer patients. Opioids should not cause CO₂ retention, if used appropriately (maximum dose orally 30mg/24hr). However, morphine and midazolam should be avoided or used with caution in patients who have further options for treatment escalation, or in whom escalation decisions have not been clarified.

- If possible start with Oral Morphine (Oramorph) 2.5mg – 5mg prn 1-2 hourly initially and increase by 30-50% (daily) up to max of 30mg/24 hours
- If beneficial consider 4 hourly regular dosing
- If NBM start 1.25-2.5mg Subcutaneous Morphine injection prn 1-2 hourly and titrate as above.
- The lowest starting dose should be used in the elderly.
- In the presence of moderate-severe renal impairment, oxycodone should be used if possible starting oral oxycodone 1-2mg prn 4 hourly or use 1mg subcutaneous oxycodone injection (smaller doses are not safely measured).
- When starting opioids monitor for signs of toxicity i.e. myoclonic jerks, new drowsiness, visual hallucinations or vivid dreams and at a later stage reduced respiratory rate below 8/min.
- If concerns re toxicity, IV/SC naloxone should be given in line with local health board guidance.

**Anxiety & Dyspnoea - Use of Benzodiazepines:**
There is no evidence that benzodiazepines directly relieve breathlessness but they are commonly used for anxiety that can accompany dyspnoea. Patients experiencing panic attacks may also benefit from explanation and reassurance.

- Lorazepam 0.5 mg sublingual prn up to qds. Can be up-titrated
- Diazepam 2 mg qds
- Midazolam 5 – 15 mg continuous subcutaneous infusion (CSCI) /24 hour in terminal phase, may need higher doses

Source: All Wales Palliative Medicine Consultants Group, March 2020.
Terminal breathlessness
Breathlessness in imminently dying patients can be distressing for both patients, their loved-ones and healthcare professionals. A calm, positive, logical approach can do much to alleviate the distress of the patient. Anxiolytics are often necessary to alleviate the associated distress of breathlessness.

Treatment of dyspnoea:
- Start Morphine Sulphate via CSCI. The dose will depend on whether the patient is already receiving an oral opioid:
  - If already taking oral morphine divide the total 24 hour dose by two for the appropriate 24 hour dose of SC morphine via CSCI.
  - If the patient is opioid naïve, consider starting morphine 10-15mg/24hours CSCI with 2.5mg SC prn and titrate as required.
- Alternatively CSCI with oxycodone 5-10mg/24 hours can be used for patients with significant renal dysfunction.

To relieve the anxiety/agitation of terminal breathlessness, consider adding:
- Midazolam 5-10mg/24hours CSCI with 2.5mg SC stat and titrate as required according to prn use. Start lower dose with renal dysfunction.
  - If midazolam is not effective or available consider:
    - Levomepromazine 12.5 mg - 25mg/24hours CSCI, with 6.25 mg SC stat and titrate as required.
    - Or Haloperidol 2.5 mg - 5mg/24 hours via CSCI, with 0.5mg - 1.5mg SC stat.
    - Both levomepromazine and haloperidol have anti-nausea and anti-psychotic effects.

Respiratory Secretions at the End of Life
There is no consistent evidence to show that noisy upper airway secretions cause breathlessness to the dying patient, but the sound can be difficult for family members and choking must be avoided at all cost. Ensure all patients receive regular oral care using a soft toothbrush and oral balance gel. Consider the following:
- Reposition the person on one side with the upper body elevated to aid postural drainage.
- Consider upper airway suctioning, if appropriate (with full PPE as aerosol generating procedure).
- Consider a trial of anticholinergics and /or diuretics to reduce noisy respiratory secretions if they are causing distress and conservative measures have not been successful.
- The anticholinergic drug of choice is Hyoscine hydrobromide 0.4mg subcut PRN 2 hourly up to 2.4mg over 24hours.
- Alternatives which are less sedating include: Glycopyrronium bromide - 0.2 mg PRN 2 hourly subcutaneous up to 1.2mg total over 24hours and Hyoscine butylbromide (Buscopan) - 20mg subcutaneous PRN, up to 120mg over 24hours.
- Furosemide injection can be used subcutaneously if no IV access in similar doses if indicated and should be considered if not responsive to anticholinergics or history of cardiovascular disease.

Palliative Care Advice – general and stock control requirements
- All areas to ensure adequate stocks of anticipatory medication are available (eg morphine, midazolam, hyoscine hydrobromide, glycopyrronium, levomepromazine and haloperidol)
- Infusions can be administered in the acute setting with the use of an intravenous pump used subcutaneously to ensure availability of McKinley T34 pumps for community use
- All areas to ensure access to a stock of Administration set and Saf T Intima needle free access device (both are usually available via Oracle).

For further information or advice, contact your local Specialist Palliative Care team in hours.

For Out of Hours contact the Specialist Palliative Medicine Telephone Advice Line:
- North Wales: 01978 316800
- South East Wales: 02920 426000
- South West Wales: 01792 703412/01792 702222
- Shropdoc (for Powys): 111