Management of Respiratory Distress and End-of-life Care in COVID-19 Residents in Long-Term Care Homes

This order set is to be used when residents' goals of care include prioritizing comfort **and** the treatment decisions are consistent with DNR, no hospital transfer, symptom and supportive care in place.

- ❑ Discontinue all non-essential medications
- ❑ Discontinue subcutaneous and IV hydration to avoid fluid overload
- ❑ Insert subcutaneous butterfly for medications
- ❑ **Avoid the use of the following as they may generate aerosolized SARS-CoV2 virus particles and infect healthcare workers and family members**
  - Humidified air/oxygen
  - Fan
  - Oxygen flow greater than 4 - 6L/min
  - High-flow nasal cannula
  - Continuous positive airway pressure (CPAP) or bilevel positive airway pressure (BiPAP)
  - Nebulized treatments (bronchodilators, epinephrine, saline solutions etc.)

All doses given below are suggested **starting doses**. COVID-19 symptoms may advance quickly. Be prepared to escalate dosing or start with higher dose in the range given. Consider giving front-line staff dose ranges and capacity for urgent clinical decision making as needed.

Dyspnea:
Position resident as upright as tolerated

Oxygen:
Supplemental oxygen to reduce the work of breathing (titrate to symptoms, not oxygen saturation)

Opioids: If resident **is not** on opioids currently,

- ❑ Morphine 1- 2.5 mg subcut or IV q30 mins prn **OR**
- ❑ Hydromorphone 0.25 -1 mg subcut or IV q30 mins prn
  - ❑ If greater than 3 prns in 24 hrs, MD to reassess
  - ❑ Titrate dose as needed according to prns and symptoms
  - ❑ If using greater than 3 prns in 24 hrs, consider using standing dose (eg. q 4h), with continued prn doses.
- ❑ If resident **is already** on opioids, continue previous opioid but consider increasing dose by 25%.
- ❑ To use the subcut route of administration, decrease the PO opioid dose by 50%.

Adjuvants: (these medications can be used in addition to opioids if needed)

- ❑ Lorazepam 0.5 mg - 1 mg q 2 hrs prn subcut or IV or sublingual
  - also useful for managing anxiety

For severe respiratory distress:
Expect to use opioid and benzodiazepine simultaneously and in higher doses.
Consider starting with higher dose immediately to achieve sedation if distress severe.

- ❑ Lorazepam 1 – 2 mg subcut or IV or sublingual q 20 - 30 mins prn until symptoms controlled

- ❑ If greater than 3 prns in 24 hrs, MD to reassess
- ❑ Titrate dose as needed according to prns and symptoms
- ❑ If using greater than 3 prns in 24 hrs, consider using standing dose, with continued prn dose.

- ❑ Midazolam 1 mg - 5 mg subcut or IV q 5 mins prn (if available)
  - ❑ Consider regular subcut or continuous subcut dosing

Respiratory secretions:
Position resident as upright as tolerated

- ❑ Glycopyrrolate 0.4mg subcut q 4 hrs prn **OR**
- ❑ Scopolamine 0.4mg subcut q 4h prn
- ❑ Atropine ophthalmic drop – use 1 – 2 drops orally under tongue q 8 hours prn
- ❑ If volume overload, furosemide 20 mg subcut and monitor response

Cough:
If currently on an opioid, titrate (**see dyspnea**)

If not on an opioid:
Moderate:
- ❑ Hydrocodone 5mg q 4-6 hrs. PRN

Severe – start opioid:
Swallow intact:
- ❑ Morphine 2.5 - 5 mg PO q 4hrs. Tablets can be used in place of liquid, if unavailable; systemic absorption required regardless of route of administration) **OR**
- ❑ Hydromorphone 0.5 – 1 g PO Q4H

Unable to swallow: (see dyspnea)
- ❑ Morphine 1- 2.5 mg subcut q1hr **OR**
- ❑ Hydromorphone 0.25 -1 mg subcut q 1hr

Agitation/restlessness:
- ❑ Non-sedating: haloperidol 0.5- 2 mg subcut or IV q 2 hrs prn
- ❑ Sedating: methotrimeprazine 6.25 – 25 mg subcut q 4 hrs prn
  - ❑ If greater than 3 prns in 24 hrs, MD to reassess
  - ❑ Titrate dose as needed according to PRNs and symptoms
  - ❑ If using greater than 3 prns in 24 hrs, consider using standing dose, with continued prn dose.

Nausea/vomiting:
- ❑ Haloperidol 0.5-1 mg subcut or IV q 4h prn. If haloperidol is contraindicated, use methotrimeprazine 2.5 to 6.25 mg subcut q 4 h prn

Fever:

- ❑ Acetaminophen 650 mg po/pr q 4h prn

Pain: If not on opioid

- ❑ Morphine 1 – 2.5 mg subcut or IV q 30 min prn OR
- ❑ Hydromorphone 0.2 – 0.5 mg subcut or IV q 30 min prn
    - ❑ If greater than 3 prns in 24 hrs, MD to reassess
    - ❑ Titrate dose as needed according to prns and symptoms
    - ❑ If using greater than 3 prns in 24 hrs, consider using standing dose, with continued prn dose.

Laxatives:

- ❑ Consider the need for laxatives including suppositories and fleet q 3 days prn.

Supportive and bereavement care:

- ❑ Consider involving supportive care colleagues (eg. SW, Spiritual Care, activation staff as appropriate)

Other orders as needed:

These recommendations are for reference and do not supersede clinical judgement. Recommendations compiled collaboratively with input from a team of Palliative Care MDs and pharmacists at Baycrest and Sinai Health System.

For further assistance including telephone/virtual support, please contact your local Palliative Consultant.