Symptom Management in Comfort-Focused Care Plan During COVID-19 Pandemic

Dyspnea/Labored Breathing:

- Opioids are gold standard for managing air hunger at end of life
  - **See attached flow chart for opioid management of dyspnea**
- For co-existing anxiety associated with dyspnea:
  - Administer benzodiazepine (e.g. **Lorazepam 1-2mg PO q2hrs or 0.5-1mg IV q1h prn**)
    - If possible, avoid benzodiazepines for patients at risk for paradoxical delirium (e.g. existing dementia, age>65, existing encephalopathy/delirium)
    - For such at-risk patients, instead consider a neuroleptic agent as first line (e.g. **Haloperidol 1-2mg IV q2 hr prn** or **Olanzapine 2.5-5mg PO/SL q6h prn**)
      - If anxiety remains uncontrolled after a neuroleptic administered regularly, *then* consider addition of benzodiazepine as above

Terminal Delirium:

- Counsel family on causes of delirium and possibility that delirium may not resolve despite best efforts
- Nonpharmacologic measures should always be implemented: eg. blinds up/lights on during day, removing tethers, familiar faces/providers at bedside, minimizing nighttime disruptions, avoiding anticholinergic medications
- Pharmacologic measures for agitated delirium: **Haloperidol 2-4mg IV q2h prn**
  - Haloperidol dose can be escalated (monitor for extrapyramidal symptoms) or medication can be rotated to **Olanzapine 2.5-5mg q6hrs PO prn** if no response to haloperidol and able to take POs.
  - If patient has Parkinson's or Lewy Body Dementia, avoid haloperidol/olanzapine and instead replace with **Quetiapine 25-50mg PO q8h prn** (if able to take PO)
  - If further advice needed, place palliative care consult for virtual consult assistance.

Terminal Secretions (upper airway):

- Counsel family that patient is not 'drowning' and that sound is air passing through pooled saliva (more uncomfortable to family to hear than patient, as patient is usually not conscious at this stage)
- Avoid deep suctioning as may trigger discomfort and gag reflex. Consider gentle oral suctioning and/or laying patient in decubitus position to allow saliva to drain
- Manage with **Glycopyrrolate 0.2-0.4 mg IV q6h prn** (low threshold to change to scheduled dosing if needed)
- If patient with low risk of delirium or already obtunded, can consider addition of **transdermal scopolamine** (with understanding that patch takes at least 12 hours to be absorbed and take effect)
- Avoid nebulized saline to thin secretions to avoid aerosolizing virus

Constipation (recommend for any patient on opioid therapy):

- If able to take oral agents, start:
  - **Senna 2 tabs PO qhs**, can increase up to 2 tabs PO TID if needed
  - **Polyethylene Glycol 17gm packet PO QD-BID prn**
  - Avoid Docusate given lack of data demonstrating benefit
  - If unable to take oral agents, suggest **Bisacodyl suppository PR daily prn** signs of abdominal discomfort/distention likely due to constipation

Pain:

- Opioid bolus dosing is the quickest way to achieve pain control at end-of-life, can follow flow chart for dyspnea
- In patients who are of having possible COVID-19 or who have confirmed COVID-19, would avoid steroids for pain. There is limited data guiding practice regarding NSAIDs in patients suspected of having or with confirmed COVID.
- However, if no concern for COVID-19, NSAIDs or steroids may be used if indicated (unless viral symptoms develop, in which case stopping steroids agents should be considered, and judgement should be used regarding NSAIDs)

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DIVISION OF PALLIATIVE CARE AND GERIATRIC MEDICINE

Opioid Decision Tree for Treatment of Dyspnea in COVID-19 Patients with Comfort-Focused Care Plan (CMO)

NOTE: This decision tree is based on expert recommendation. t cannot address all clinical situations. Adjustments may be needed. *Consider paging Palliative Care consult for virtual advice if needed.*

Adapted from University of Washington Medicine

Does patient have dyspnea that is uncontrolled by current standard therapy?

No → Continue current treatment plan. Evaluate for new symptoms regularly.

Yes ↓

Has patient been on chronic opioids prior to admission?

Yes → Consult palliative care for a virtual chart consult to review current opioid treatment plan

No ↓

Is patient <u>able</u> to tolerate PO and/or experiencing only mild to moderate dyspnea (as opposed to severe)?

Yes ↓ Order PO opioid PRN*

No ↓ Order IV opioid PRN*

If dyspnea is constant and requiring frequent PRNs (more than 3 doses in any 6 hour period):

- For oral opioids, begin Q3 or Q4H **scheduled around-the-clock** short-acting oral opioid at doses to maintain relief.
- For IV opioids, initiate opioid infusion (see next page for guidance)
- Continue to have available adequate PRN dosing for breakthrough dyspnea

*How to determine initial opioid doses:

<u>**Able** to tolerate oral medications and experiencing **mild** dyspnea:</u>

NORMAL renal function

- Start low dose oral morphine solution (2mg/ml) 5-10mg PO q1h PRN
- For frail older patients, halve dose (e.g. 2.5-5mg PO q1h PRN)
- If no relief after 2 hours, increase dose by 50-100%

ABNORMAL renal function (CrCl<50):

- Start low dose hydromorphone solution or tablet 1-2mg PO 1h PRN
- For frail older patients, halve dose (e.g. hydromorphone 0.5-1mg PO q1h PRN)
- If no relief after 2 hours, increase dose by 50-100%

<u>**Unable** to tolerate oral medications and/or experiencing **severe** dyspnea</u>

NORMAL renal function

- Start IV morphine 2-4mg IV Q15min PRN (IV opioids have 10-15 minutes onset of action)
- For frail older patients, halve dose (e.g. 1-2mg IV Q15 min PRN)
- If no relief after 2 doses, double the dose every 15 minutes and continue until comfortable

ABNORMAL renal function (CrCl<50)

- Start IV hydromorphone 0.2-0.4mg IV Q15 min PRN
- For frail older patients, halve dose (e.g. IV hydromorphone 0.1-0.2mg IV Q15min PRN)
- If no relief after 2 doses, double the dose every 15 minutes and continue until comfortable

Communicate medication plan with bedside RN

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Opioid Decision Tree for Treatment of Dyspnea in COVID-19 Patients with Comfort-Focused Care Plan (CMO)

Starting and Titrating Continuous Opioid Infusions for Dyspnea

Order opioid **INFUSION with BOLUS**

To determine the starting rate:

1. Add up the past 12-hour IV opioid requirement
2. Divide by 12 to reach hourly rate

E.g. Patient received 24mg IV morphine in 12 hours. Starting infusion rate would be 2mg/hr.

→

ALWAYS use PRN boluses does to address acute dyspnea. PRN bolus dosing should be 10-20% of the 24-hour opioid dose.

E.g. Patient is on Morphine 2mg/hr. PRN bolus would be 2-4mg Q3 hours PRN

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Increase infusion rate if patient requiring >3 PRN doses in 4 hours:

1. Total the prn use and divide by number of hours over which they were given
2. Add this to current infusion rate

E.g. Patient is on Morphine IV 2mg/hr and receives 2mg IV PRN boluses x 6 doses (12mg) in 4 hours

This is an additional 3mg/hr. The new rate should be increased from 2mg/hr to 5mg/hr.

↓

Communicate medication plan with bedside RN

If symptoms are **UNCONTROLLED** despite initial efforts:

- Return to Opioid Decision Tree to ensure patient is on the optimal opioid regimen (eg, if on oral opioids, switch to IV opioids)
- Providers should do a full dyspnea /symptom assessment at the bedside and treat reversible causes of discomfort (within goals of care)
- If symptoms remain uncontrolled, and no reversible causes identified, consider increasing IV PRN regimen by 50-100%.
- Consider changing IV dosing interval to q10 minutes PRN and repeat dosing until symptoms are controlled
- **If symptoms remain uncontrolled or if concerning neurotoxic side effects are observed:** new delirium, increasing pain with escalating opioid doses (hyperalgesia), myoclonus, etc., **page Palliative Care consult pager (or 34888 if after hours) for advice**

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