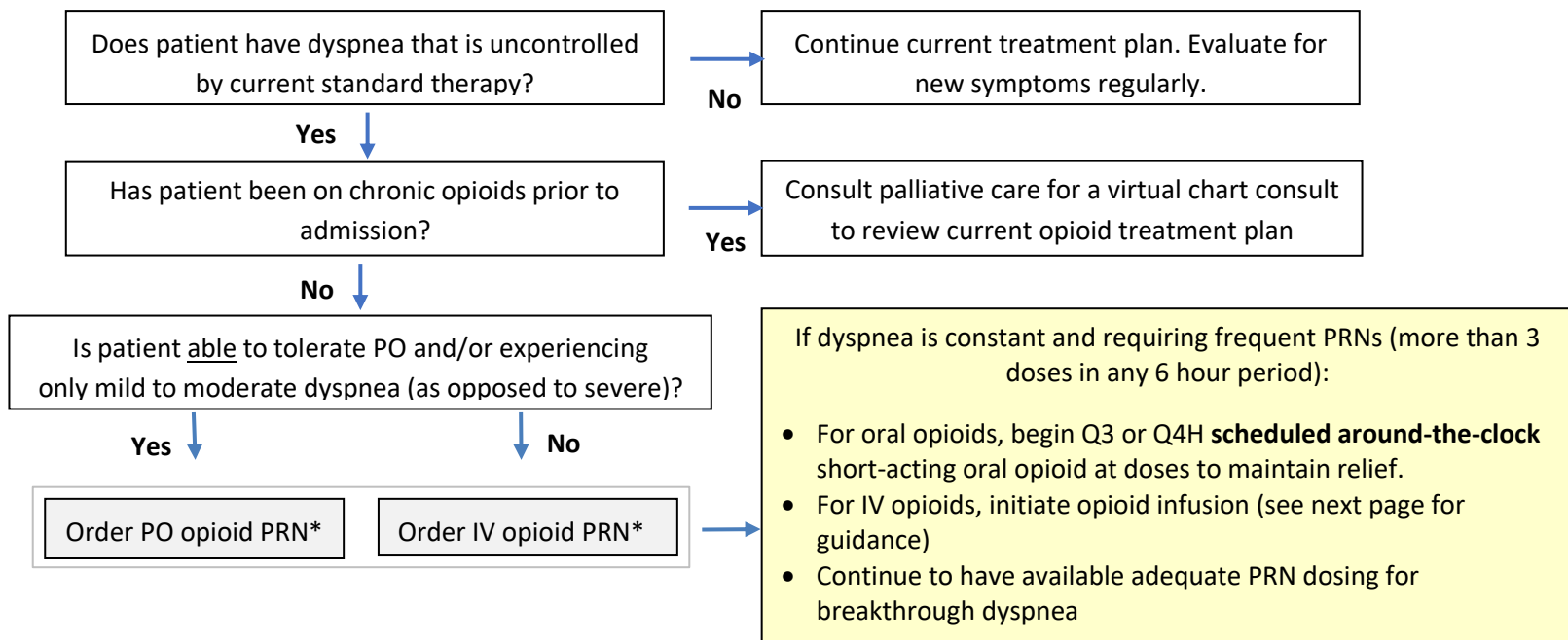


Opioid Decision Tree for Treatment of Dyspnea in COVID-19 Patients with Comfort-Focused Care Plan (CMO)

NOTE: This decision tree is based on expert recommendation. It 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



*How to determine initial opioid doses:

Able to tolerate oral medications and experiencing mild dyspnea:

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%

Unable to tolerate oral medications and/or experiencing severe dyspnea

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

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

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.

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**

Communicate medication plan with bedside RN

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