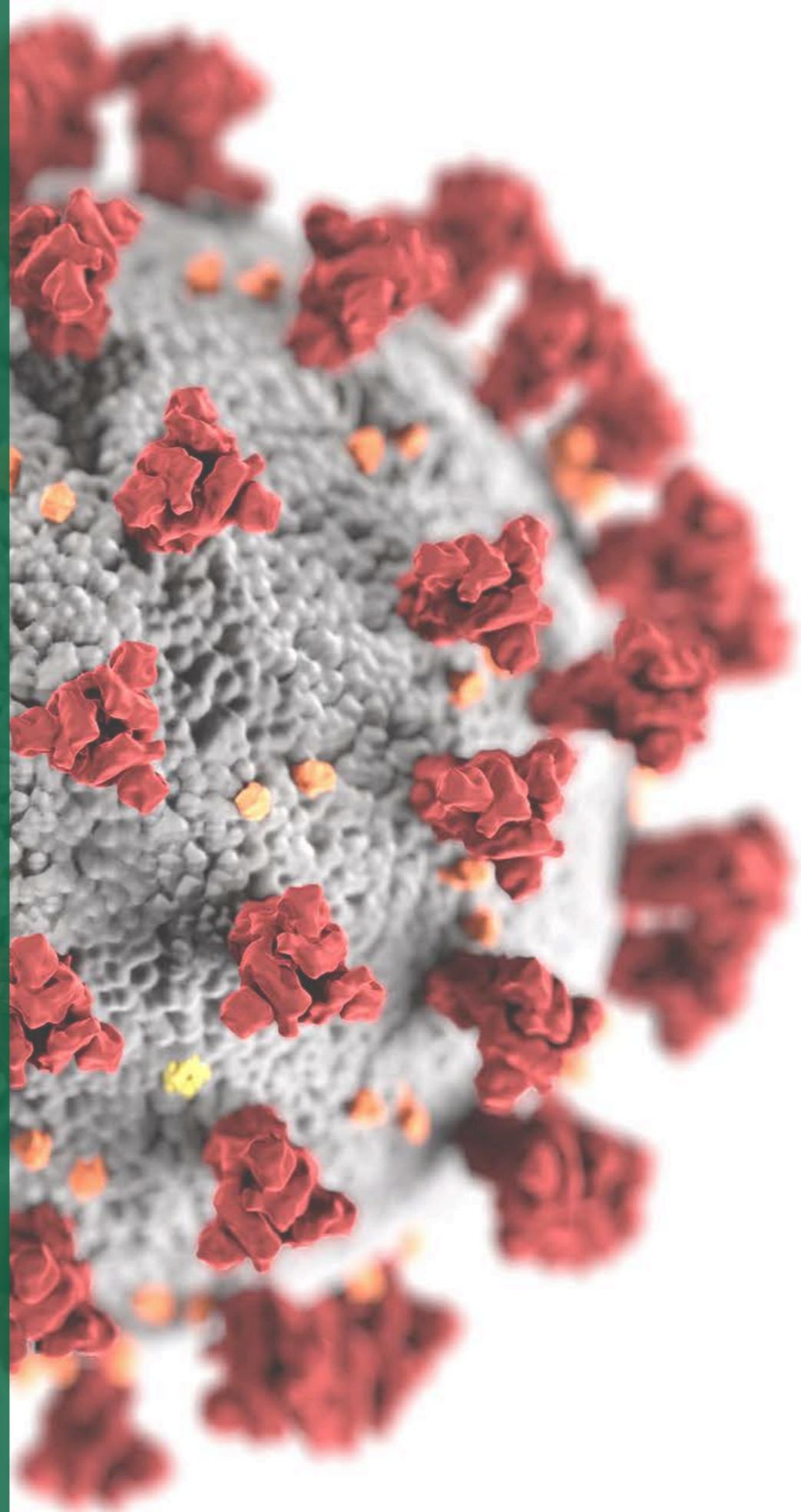


Palliative Care Toolkit

For COVID-19

Division of Palliative Medicine &
UVM Home Health and Hospice
Updated April 13th, 2020

— THE —
University of Vermont
HEALTH NETWORK



About This Guide

Palliative Care Skills for all Clinicians

The COVID-19 pandemic presents a severe acute care crisis of unknown duration, impacting the lives of patients, families and clinicians. In this moment, the priorities of palliative care — **quality of life, discernment of patient goals, pain and symptom management, and support for caregivers** — have never been more crucial.

We've compiled this toolkit to help clinicians in our community respond to the epidemic. The volume of seriously ill patients may exceed the capacity of palliative care clinicians in our Network, so these guidelines are intended to provide an extra layer of support to any clinician managing serious illnesses caused by the COVID-19 pandemic.

This Toolkit Contains:

- Communication guidance specifically for the COVID-19 crisis,
- Crisis symptom management protocols, and
- Information on how Palliative Care can support you and your patients.

What Next?

As the pandemic evolves, we may issue updated guidelines to respond to the situation. If you have non-urgent questions about this toolkit, please reach out to talkvermont@med.uvm.edu. For everything else, please call or page our [Palliative Care teams](#).

We are being called to action at a moment of unprecedented need. Together, we'll get through the weeks ahead by summoning our compassion and expertise in service of the communities we serve.

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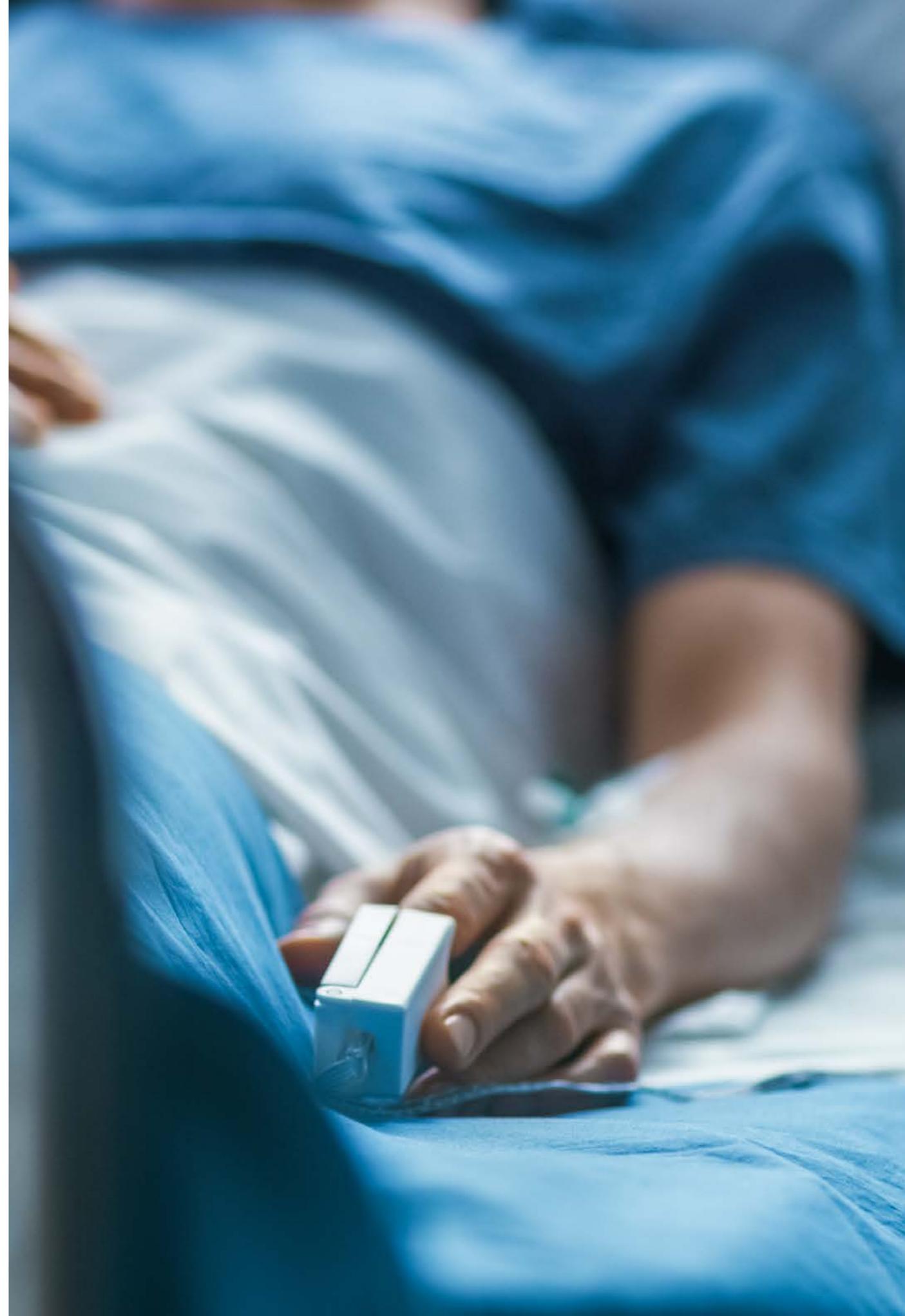
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COVID-Related Conversation Guide & Communication Tips

Conversations | Screening and Triaging

VitalTalk, a nonprofit organization dedicated to improving communication skills for serious illness, has crowdsourced this quick guide to provide practical advice for challenging conversations related to COVID-19. Building on experience in studying and teaching communication, they've drawn on their national faculty to create this guide. We have adapted it for our own network.

The appendix has an additional mnemonic for [responding to emotions](#).

For general tools for serious illness conversations, go to our [TalkVermont Resources page](#) to download patient and clinician conversation guides for serious illness. There is also an extended version of the Conversation Toolkit on that page.

When someone is worried they might be infected

<i>What They Say</i>	<i>What You Could Say</i>
Why aren't they testing everybody?	Currently in our state, we don't have enough test kits. I wish it were different.
Why do the tests take so long?	It can be hard to wait. The lab is doing them as fast as they can.

When someone may want to opt out of hospitalization

<i>What They Say</i>	<i>What You Could Say</i>
I am worried about this new virus. What should I be doing?	You are right to be concerned. Here's what you can do: Please limit your contact with others. Then you should pick a person who knows you well enough to talk to doctors for you if you did get really sick. That person is your health care agent. If you are the kind of person who would say, no thanks, I don't want to go to the hospital if I were to get very sick, you should tell us and your health care agent.
I realize that I'm not doing well medically even without this new virus. I want to take my chances at home [or in this long term care facility].	Thank you for telling me that. What I am hearing is that you would rather not go to the hospital if we suspected that you have the virus. Did I get that right?

Conversations | Triage & Admitting

When you're deciding where a patient should go

<i>What They Say</i>	<i>What You Could Say</i>
Why shouldn't I just go to the hospital?	Our primary concern is your safety. We are trying to organize how people come in. You can help speed up the process for yourself and everyone else by _____.
Why are you keeping me out of the hospital?	I imagine you are worried and want the best possible care. Right now, the hospital should be for those that absolutely need it. The safest thing for you is to _____.

When your patient needs the hospital, or the ICU

<i>What They Say</i>	<i>What You Could Say</i>
Does this mean I have COVID19?	We will need to test you with a nasal swab, and we will know the result within the next few days. It is normal to feel stressed when you are waiting for results.
How bad is this?	From the information I have now and from my exam, your situation is serious enough that you should be in the hospital. We will know more in the next day, and we will update you.
Is my grandfather going to make it?	I imagine you are scared. Here's what I can say: because he is 90, and is already dealing with other illnesses, it is quite possible that he may die in the hospital. Honestly, it is too soon to say for certain.
How can you not let me in for a visit?	I so wish I could let you visit, because I hear it's important to you. The risk of spreading the virus is so high that I am sorry to say we cannot allow visitors. We can, however, help you be in contact with your loved one electronically.

Conversations | Goals of Care Script

This is for patients whom you are worried could die from their COVID-19 infection or have the potential to die from COVID-19.

Step 1: Heads Up + Asking Permission

"I am afraid that I have some serious news to share with you. Would it be okay if we talk about it?"

or

"Given the situation with the coronavirus, I am asking all my patients about what matters most and what they might expect for their situation. This way, we can prepare for the future, so you get the best care possible. Would this be ok?"

Step 2: Deliver a Headline

"The test results show that it is highly likely you (your loved one) have COVID-19. I am very worried that you (your loved one) could develop a serious complication or even die from this virus."

or

"Based on your medical conditions, you are at increased risk for serious complications from coronavirus and could even die from your infection."

Step 3: Respond to Emotion

"I can't even imagine how hard it is to hear this news."

"I want you to know that we will be here with you as you face these challenges."

[respond to emotion until they are ready for next steps]

Step 4: Ask Permission to Move Forward

"Would it be okay if we take a step back and talk about what is important to you (your loved one)."

Step 5: Asking about Goals

"Knowing this news, tell me what is important to you (your loved one)"

"Knowing what could happen, what worries you (your loved one) the most?"

"What would be an unacceptable life or a life worse than death for you (your loved one)?"

Step 6: Align with Goals

"What I am hearing you say is that your _____ is most important to you"

Step 7: Propose a Plan that Matches Goals

"Thank you for sharing that information with me."

"Would it be okay if I make a recommendation based off of what you told me."

"Given what you told me, I would recommend that we admit you to the hospital and continue to support your breathing through oxygen and medications. However, if things got worse, I would not recommend putting you on a breathing machine as I do not think that is aligned with your goals."

"How does that sound?"

Step 8: Document

- Document in medical chart the conversation of what medical information was shared, what were the patients goals and what was the agreed upon plan of care.
- Update code status order.
- Complete MOLST/COLST if appropriate.

Conversations | Counseling & Deciding

When coping needs a boost, or emotions are running high

<i>What They Say</i>	<i>What You Could Say</i>
I'm scared.	This is such a tough situation. I think anyone would be scared. Could you share more with me?
I need some hope.	Tell me about the things you are hoping for? I want to understand more. What gives you hope on an ordinary day?
You people are incompetent!	I can see why you are not happy with things. I am willing to do what is in my power to improve things for you. What can I do to help?
Do I need to say my goodbyes?	I see you are worried. We are worried too. What's most pressing on your mind? Are there people in your life that need to know you love them, even if things are fine?

When things aren't going well, goals of care, code status

<i>What They Say</i>	<i>What You Could Say</i>
I want everything possible. I want to live.	We are doing everything we can. This is a tough situation. Could we step back for a moment so I can learn more about you? What do I need to know about you to do a better job of taking care of you? What is important in your life?
I don't think my spouse would have wanted this.	Well, let's pause and talk about what he would have wanted. Can you tell me what he considered most important in his life?
I am not sure what my grandfather wanted—we never spoke about it.	You know, many people find themselves in the same boat. This is a hard situation. To be honest, given his overall condition now, if we need to put him on a breathing machine or do CPR, he will not survive. Given all this, I would recommend that we allow him to die peacefully and not try to restart his heart as I don't think it will benefit him. I know that is hard to hear. What do you think?

Conversations | Crisis Script

This is for patients whom you are worried could die from their COVID-19 infection and when there is a shortage of resources.

Step 1: Heads Up + Asking Permission

"I am afraid that I have some serious news to share with you. Would it be okay if we talk about it?"

Step 2: Headline with Resource Allocation

"If this infection becomes severe, despite our best efforts, we know that in people who already have serious medical conditions, invasive treatments like CPR and ventilators (breathing machines that require a tube down into your lungs) do not help people survive and would only cause harm.

So for you, what this means is that we care for you on the floor and do everything we can to help you feel better and fight this illness. What we won't do is to transfer you to the ICU, or do CPR if your heart stops".

(Allow a pause for family to absorb this information).

Step 3: Respond to Emotion

"I have no words."

"We will continue to support you and your family."

[respond to emotion until they are ready for next steps]

Step 4: Ask Permission to Move Forward

"Would it be okay if we talk about what is important to you (your loved one)."

Step 5: Asking about Goals

"If things do get worse, tell me what is important to you (your loved one)"

"What worries you (your loved one) the most?"

"What would be an unacceptable life or a life worse than death for you (your loved one)?"

Step 6: Align after Each Goal

"What I am hearing you say as that your _____ is most important to you"

Step 7: Propose a Plan

"Thank you for sharing that information with me."

"Would it be okay if I make a recommendation based off of what you told me."

"Given what you told me, I would recommend that we continue to care for your husband with oxygen and medications. And if things get worse and he is dying, we will focus on his comfort and dignity as you mentioned that those are important to him"

"How does that sound?"

Step 8: Document

- Document in medical chart the conversation of what medical information was shared, what were the patients goals and what was the agreed upon plan of care.
- Update code status order.
- Complete MOLST/COLST if appropriate.

Conversations | Scarcity of Resources

When scarcity of resources forces triage and rationing

<i>What They Say</i>	<i>What You Could Say</i>
Shouldn't I be in an intensive care unit?	Your situation does not meet criteria for the ICU right now. The hospital is using special rules that let us use ICU beds fairly for everyone when there just aren't enough of them. I wish this was a year ago, when we had enough beds. We'll keep doing everything we can no matter which floor you are on.
Are you just discriminating against her because she is old?	No. We are using guidelines that were developed by people in this community--clinicians, policymakers, and regular people--to be sure that no one is singled out during this crisis. I know it is hard to hear.
It sounds like you are rationing.	These are extraordinary times. What we are doing is trying to spread out our resources in the best way possible. This is a time where I wish we had more for every single person in this hospital.
You're playing God. You can't do that.	I didn't mean to give you that feeling. Across Vermont, every hospital is working together to try to use resources in a way that is fair for everyone. I realize that we don't have enough. I wish we had more. Please understand that we are all working as hard as possible.
Can't you get 15 more ventilators from somewhere else?	Right now the hospital and hospitals around the country are operating over capacity. Unfortunately, it is not possible for us to increase our capacity like that overnight. I realize that is disappointing to hear.
How can you just take her off a ventilator when her life depends on it?	I can't even imagine how hard this is for you and your family. Unfortunately, her condition has gotten worse, even though we are doing everything. Because we are in extraordinary times, we are following special guidelines that apply to everyone here. We cannot continue to provide critical care to patients who are not getting better. Because your wife will likely die even on the ventilator, we will plan to take her off of it and continue to care for her in the best way possible. I know that is hard to hear.

Conversations | Death Notification

When you are telling someone over the phone

<i>What They Say</i>	<i>What You Could Say</i>
Yes I'm his daughter. I am 5 hours away.	I have something serious to talk about with you. Are you in a place where you can talk?
What is going on? Has something happened?	I am calling about your father. He died a short time ago. The cause was COVID-19.
[Crying]	My deepest condolences. [Silence. If you feel you must say something: "Take your time. I am here"].
I knew this was coming, but I didn't realize it would happen this fast.	I can only imagine how shocking this must be. [Silence. Wait for them to restart]

Managing | Your Own Emotions

When you're worrying about what might happen

<i>What You May Fear</i>	<i>What You Can Do</i>
That patient's son is going to be very angry.	Before you go in the room, take a moment for one deep breath. What's the anger about? Love, responsibility, fear?
I don't know how to tell this adorable grandmother that I can't put her in the ICU and that she is likely going to die.	Remember what you can do: you can hear what she's concerned about, you can explain what's happening, you can help her prepare, you can be present. These are gifts.
I have been working all day with infected people and I am worried I could be passing this on to the people who matter most to me.	Talk to them about what you are worried about. You can decide together about what is best. There are no simple answers. And worries are easier to bear when you share them.
I am afraid of burnout, and of losing my heart.	Can you look for moments every day where you connect with someone, share something, enjoy something? Remember that whatever your own state, that these feelings (e.g. burnout, loss) are intrinsic to our human condition. Can you accept them, not try to push them away, and then decide what you need?

When you've lost someone

<i>What You May Be Thinking</i>	<i>What You Can Do</i>
I should have been able to save that person.	Notice: am I grading myself? Could I step back and just feel? Maybe it's sadness, or frustration, or just fatigue. Those feelings are normal. And these times are distinctly abnormal.
OMG I cannot believe we don't have the right equipment / how mean that person was to me / how everything I do seems like it's blowing up.	Notice: am I catastrophizing? Is all this analyzing really about something else? Like how sad this is, how powerless I feel? Under these conditions, such thoughts are to be expected. Can we notice them, and feel them, maybe share them? And then ask ourselves: can I step into a less reactive, more balanced place even as I move into the next thing?

Techniques | Responding to Emotion

Naming and Validating - This response to emotion helps patients feel heard. We often name and validate strong emotions both negative and positive.

- "That makes perfect sense. It feels hard to live in this uncertainty."
- "Wow, I see how happy you are that you are feeling better today and looking forward to your crossword puzzles!"

Normalizing - This tells people they are not alone with their emotions.

- "Most of my patients say the same things you are saying. It is so normal to feel scared that this is all happening."

Aligning/non-abandonment - This tells patients and their loved ones that you are there for them.

- "I hear how hard it is to speak to your children about the pandemic. I want you to know that we will be here with you to help you navigate these conversations."

Simple Reflection - This shows active listening.

- "I hear how very sad all of this is."
- "I hear that you are worried about your sister"

Complex Reflection - This not only shows you are actively listening, it also helps to validate a hypothesis that you might be thinking about the persons emotions.

- "I hear how sad this is and I wonder if it is even harder right now given that your daughter is going off to college?"
- "I hear how scared you are and I wonder if you are most scared about losing your dad?"

Curiosity - Be curious. This helps to build connection and further your understanding the person's situation and emotions.

- "What was that experience like for you? Tell me more about what specifically the hardest part was?"

Telemedicine | Communication Tips

During the the COVID-19 pandemic, telemedicine is playing a key role for the UVM Health Network so that those who are symptomatic or wish to stay home can still connect with their clinicians. Below are helpful communication techniques that are unique to telemedicine encounters.

Introduction

This can be stressful and a new experience for patients who will need reassurance. It is important to orient them to the visit, setting expectations and the length of time. Also, let them know if something goes wrong you will call them back.

Environment

If you anticipate there will be expressions of strong emotions, make sure to cue the patient to be in a more private setting where they will feel comfortable expressing emotions. For example, they may not want to have the kids around.

Look into the Camera

Make sure you have your screen aligned in such a way that you can look into the camera directly, creating eye contact. Paradoxically, one trick is to use a smaller device (i.e., phone, tablet) to foster a more intimate connection. Background should be plain and without windows.

Attend to Environmental Cues

In telemedicine, we are invited into a patient's inner world. What do you notice? For example, are they in a darkened room? Are they wanting to have a more superficial conversation today? These clues can help guide your questions and emotional responses.

Conveying Emotion

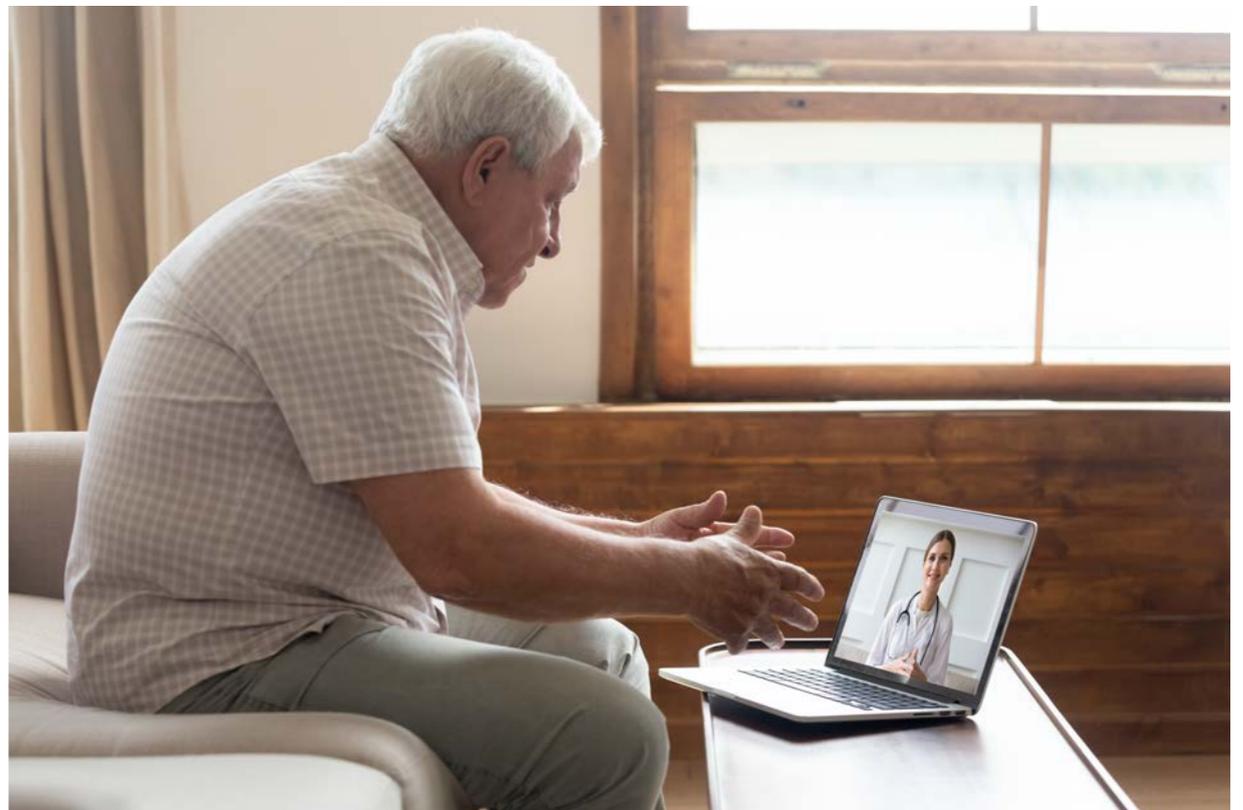
Visual gestures can convey empathy and connection such as touching your heart when expressing concern. You can also use verbal or sound cues to indicate you are listening.

Ending the Session

Ending a telemedicine session can feel very abrupt. We don't get to walk the patient to the door and say goodbye. Think about how you might want to wind things down if a patient has expressed emotions. You may want to signpost that the appointment is coming to an end.

- "I see that we have about 10 minutes left. I wonder what might be most helpful to discuss as we finish up for today?"

Be sure to include next steps and what to expect after the visit.



Symptom Management Guidelines



Symptom Management | Fever

Fever is the most common symptom for patients infected with COVID-19. Fever has been reported in up to 85-99% of patients in some studies. Fevers can range from 37.5-40.0 Celsius (99.5-104 Fahrenheit), and are often intermittent.

General Measures:

- Use cool compresses; cover the patient with only a sheet.
- Monitor hydration and nutrition.

Note: While fans can be helpful for fevers, fans are not recommended in patients infected with COVID-19 as they have the potential to expand the range of droplets.

Pharmacological Agents:

- **Acetaminophen:** use as first-line treatment for fever.
 - Elimination half life is 2-3 hours in adults.
 - Can use oral, rectal or intravenous (limited availability).
- **Ibuprofen:** second line agent.
 - Use with caution in renal disease or patients with a bleeding risk.

In Actively Dying Patients:

- For the unresponsive, actively dying patient, limit medical treatment of fever to those who appear to be suffering despite general fever measures.
 - Note temperature fluctuation may be part of the dying process and recalcitrant to antipyretics. In this case, education and reassurance of loved ones is the best intervention.

Adult Dosing for Fever Medications

Acetaminophen

PO/PR: 325-650mg q4H PRN or scheduled

IV: 650mg q6H PRN or scheduled (limited availability)

Max 4g daily

Ibuprofen

PO: 400-600mg q4H PRN or scheduled

Max 2400-3200mg daily

Peds Dosing for Acetaminophen

(refer to standardized weight-based dosing nomogram)

PO: 10-15 mg/kg/dose q4-6H PRN or scheduled

PR: 10-20 mg/kg/dose q4-6H PRN or scheduled

Max 75mg/kg/day

>50 kg use adult dosing



Symptom Management | Dyspnea

Severe and sometimes milder disease in people infected with COVID-19 can include dyspnea and hypoxia. Dyspnea is a subjective experience described as air hunger and is often accompanied by increased work of breathing. Best practice is to optimize non-opioid measures and, if insufficient, to use opioids for refractory dyspnea.

General Measures:

- Positioning (sitting up) and using pillows behind the patient's neck and back to help expand the chest.
- Bedside relaxation techniques may be helpful.
- In the imminently dying patient, discontinuing parenteral fluids is appropriate.

Note: caution with using fans for patients infected with COVID-19 as it may increase droplet spread. Nebulized medications may also carry this risk.

Treatment with Oxygen:

- Oxygen is often, but not universally, helpful.
- Use for patients who have hypoxia (oxygen saturation < 90%) or for patients whom you feel it may improve symptoms.
- Certain oxygen delivery methods (e.g. High Flow NC or BiPAP) may carry a higher risk of droplet spread in COVID-19.

Pharmacological Agents:

- **Disease directed therapy:** consider using diuretics or bronchodilators if there is evidence this will relieve symptoms.
- **Opioids: drugs of choice for refractory dyspnea.**
 - Low dose opioids have been shown to improve dyspnea.
 - Although morphine is more commonly studied in controlling dyspnea, most major opioids seem to have similar effects.
 - In nonverbal patients, medications should be given for increased work of breathing (e.g. accessory muscle use).
- **Benzodiazepines:** There is little evidence for the efficacy of benzodiazepines alone in treating dyspnea. However, they can be effective in treating concurrent anxiety.

Adult Dosing for Dyspnea Medications

Morphine (if opioid naïve)

PO: 2.5mg-5mg q2H PRN

IV: 1-2mg q1H PRN

Hydromorphone (if opioid naïve)

PO: 1-2mg q2H PRN

IV: 0.2-0.4mg q1H PRN

Lorazepam

PO or IV: 0.50-1mg q6H PRN

Refer to [general opioids information section](#) if required

Pediatric Dosing for Dyspnea Medications

Morphine (if opioid naïve)

PO: 0.1mg/kg/dose q3-4H PRN

Max starting dose is 5mg

w/ close follow-up for adjustments to dose/frequency as needed.

Lorazepam

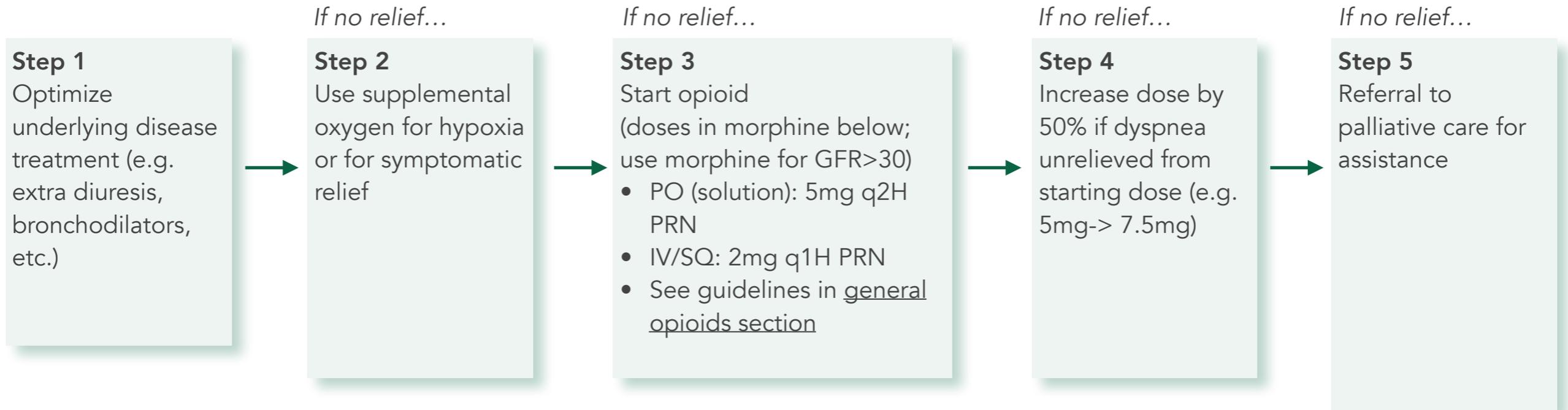
PO/IV: 0.02-0.05 mg/kg/dose q6H PRN

Max 2mg/dose

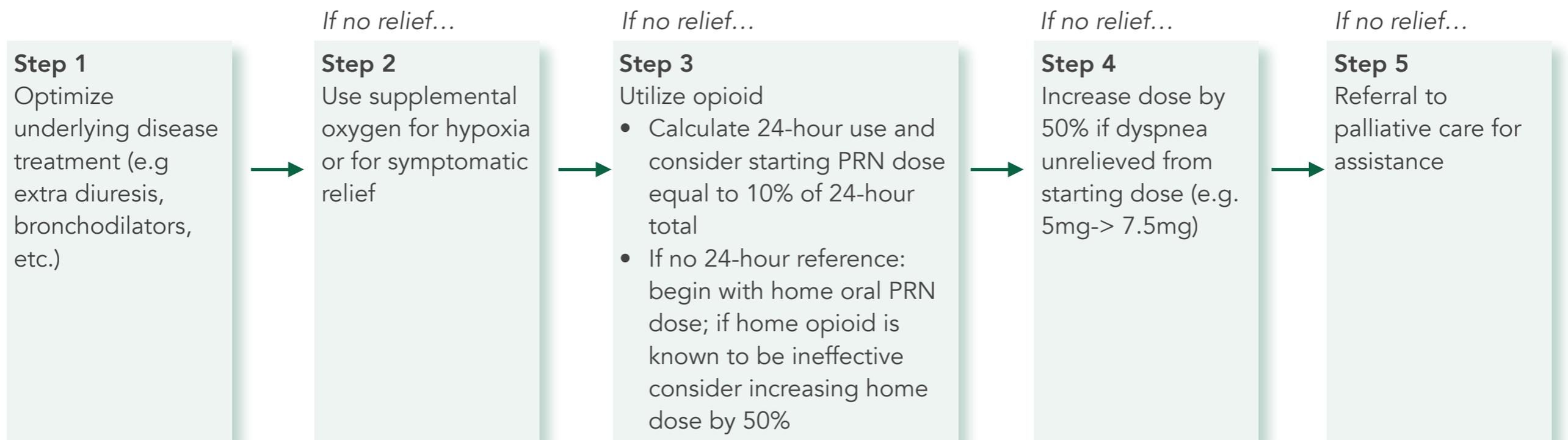


Symptom Management | Dyspnea

Dyspnea Management Protocol in the Opioid Naïve Adult Patient



Dyspnea Management Protocol in an Adult Patient Who Is Already Taking Opioids



Symptom Management | Pain

Headache and myalgia can be common symptoms in COVID-19 patients. Patients are unlikely to have extreme pain unless the patient has pain from underlying co-morbidities.

Note on Preventing Constipation

For patient who are bedridden or taking scheduled opioids:

Polyethylene glycol: give 17g by mouth daily. If no daily bowel movement increase to twice daily. And/or:

Senna: take 8.6-17.2mg by mouth at bedtime. If no daily bowel movement increase to twice daily. And/or:

Dulcolax suppository: 10mg per rectum every morning.

Acute Pain Adult Protocol

Step 1

Start non-opioids

Acetaminophen

PO/PR/IV: 325-650mg q4H PRN; or schedule if pain is constant (limited availability for IV)

Ibuprofen

PO: 400mg q4H PRN or schedule if pain is constant

If no relief...

Step 2

Start opioids

Morphine (for GFR>30)

PO (solution or tablet): 7.5-15mg q2H PRN
IV/SQ: 2-5mg 1H PRN

Hydromorphone (for GFR<30)

PO: 2-3mg q2H PRN
IV/SQ: 0.4-0.6mg q1H PRN

- Increase by 50% for pain unrelieved by starting dose.
- If a patient is using most PRNs, consider scheduling dose every 4H and add a breakthrough dose that represents 10% of 24hr dose every 1-2H PRN.

If no relief...

Step 3

Referral to Palliative Care

See guidance on [acute crisis management for actively dying patients](#).

Peds Dosing for Pain Management

Acetaminophen

[refer to standardized weight-based dosing nomogram]

PO: 10-15 mg/kg/dose q4-6H PRN

PR: 10-20 mg/kg/dose q4-6H PRN

Max 75mg/kg/day

>50 kg use adult dosing

Morphine (if opioid naïve)

PO: 0.3-0.5mg/kg/dose q3-4H

IV/SQ: 0.05-0.2 mg/kg/dose q2-3H

w/ close follow-up for adjustments to dose/frequency as needed.



Symptom Management | Cough

Cough is also common in patients infected with COVID-19. In one study, 59% of patients reported cough with only 30% reporting sputum production.

General Measures:

Non-pharmacologic therapy is directed at the symptom rather than the underlying etiology, and it aims to control rather than eliminate cough

- Upright positioning reduces coughing secondary to reflux or aspiration.
- Humidified oxygen reduces dryness and irritation of airways.
- Encourage warm fluids, frequent sips of water.

Pharmacological Agents:

• Suppressants

- Dextromethorphan: most commonly used antitussive.
 - May only be available in combination with guaifenesin.
- Benzonatate: inhibits cough by anesthetizing stretch receptors in the respiratory tract.
 - It is not recommended in young children (<12Y).
- All opioid analgesics have antitussive activity. For patients already taking opioids for other indications, there is no need to add another opioid.

• Mucolytics and Drying Agents

- Guaifenesin: an expectorant that thins bronchial secretions and eases expectoration.
 - May increase fluid in the respiratory tract, not recommended if the cough reflex is diminished.
- Anticholinergics (hyoscyamine or scopolamine): helpful in patients with copious upper respiratory secretions.

• Bronchodilators

- Have not been shown to be effective apart from specific indications (e.g., for COPD or asthma exacerbations).
- If using bronchodilators, use non-nebulized forms such as inhalers with spacers for patients with COVID-19 infections.

Adult Dosing for Cough Medications

Dextromethorphan

PO: 10-20mg q4H PRN or scheduled

Benzonatate

PO: 100-200mg q4H PRN or scheduled

Guaifenesin

PO: 200-400mg q4H PRN or scheduled

Pediatric Dosing for Cough Medications

Dextromethorphan

Oral syrup (immediate release):

2-5 years: 5 mg q4H PRN, max 30mg/day (6 doses)

6-11 years: 10 mg q4H PRN, max 60mg/day (6 doses)

≥12/adolescents: 20 mg q4H PRN, max 120mg/day (6 doses)

Oral Guaifenesin syrup

2-5 years : 50-100 mg q4H PRN, max 600mg/day (6 doses)

6-11 years: 100-200 mg q4H PRN, max 1200mg/day (6 doses)

≥12 years: 200-400mg q4H PRN, max 2400mg/day (6 doses)



Symptom Management | Airway Secretions

Excessive secretions may be significant in severe COVID-19 infections. This is most likely to be a concern when the patient is in the dying process and unable to actively clear secretions because of lost reflexive swallow. In the case of the 'death rattle', if recalcitrant to below interventions, the best intervention is education and reassurance to family that the patient is not suffering and that the noise is a natural part of the dying process.

General Measures:

- Reposition patient (especially propped on their side to allow for postural drainage and opening the upper airway).
- Gentle oropharyngeal suctioning (avoid deep suctioning in dying patients).
- Limit fluids introduced into the mouth and switch oral/sublingual medications to other routes.
- Limit or stop IV fluids and enteral feedings.

Pharmacological Agents:

We recommend limiting medical intervention to patients who appear to be suffering from excessive secretions (including causing worsening dyspnea, choking/gagging, cough) despite non-pharmacological interventions.

Note: these medications may lead to uncomfortable dryness and more viscous/difficult to clear secretions.

- **Glycopyrrolate:** first-line agent for copious secretions
 - Does not cross the blood brain barrier and reduces possibility of delirium.
- **Atropine 1% Ophthalmic Solution:** second-line agent.
 - Given sublingually to dry up future secretions.
- **Scopolamine Patch:** only for severe cases given higher risk of delirium.
 - Onset ~12 hours and ~24 to steady state.
 - Only use for adolescents and adults.

Adult Dosing for Secretion Medications

Glycopyrrolate

IV: 0.2mg-0.3mg q4H PRN or scheduled

Atropine 1% ophthalmic solution

SL: 0.2mg-0.3mg q4H PRN or scheduled

Scopolamine Patch

Transdermal: 1.5mg patch q72H

Pediatric Dosing for Secretion Medications

Glycopyrrolate

IV/SQ: 0.004-0.01 mg/kg/dose q4H PRN

Atropine 1% ophthalmic solution

SL: 1-2 drops q4H PRN



Symptom Management | Nausea/Vomiting

Nausea and vomiting may be a symptom of COVID-19 and a patient's course may be complicated by other causes as well (e.g. uremia, adverse reaction to medications, headache, anxiety, constipation, excessive secretions). The etiology is often multifactorial, and treatment begins with identifying and modifying most likely causes.

General Measures:

- Minimize triggers (viscous fluids, smells, etc.).
- Optimize mouth care and non-oral routes of medications.
- Opioid rotation (morphine is especially likely to cause nausea).

Pharmacological Agents:

- **Ondansetron:** first-line without clear etiology/multifactorial.
 - Can cause constipation and prolong QTC interval.
- **Prochlorperazine:** preferred for opioid related nausea.
 - Can cause dry mouth.
- **Haloperidol:** also used for medication related nausea.
- **Metoclopramide:** first line for dysmotility or partial bowel obstructions.
- **Lorazepam:** first line for anxiety associated nausea.

Adult Dosing for Antiemetics

Ondansetron

PO/IV: 4-8mg q6-8H PRN or scheduled

Prochlorperazine

PO/PR/IV: 5-10mg q6-8H PRN or scheduled

Haloperidol

PO: 0.5mg-1mg q6H PRN or scheduled

IV: 0.25-0.5mg q6H PRN or scheduled

Metoclopramide (for dysmotility)

PO/IV: 5-10mg q4-6H PRN or scheduled

Lorazepam (for anxiety-related)

PO/IV: 0.5-1mg every 6H PRN or scheduled

Pediatric Dosing for Antiemetics

Ondansetron

PO/IV: 0.15mg/kg/dose q8H PRN

Max 4mg/dose

Prochlorperazine

0.1mg/kg q6-8H PRN

Haloperidol

PO: 0.01 - 0.025 mg/kg/dose q8H PRN

(limited data, only for >3yrs)

Max 0.15 mg/kg/day

Lorazepam

PO/IV: 0.02-0.05 mg/kg/dose q6H PRN

Max 2mg/dose



Symptom Management | Agitated Delirium

Change in mental status is possible in patients infected with COVID-19 particularly with more severe forms of disease. Attempt to reverse potential causes of agitation/delirium in COVID-19 infections when possible (e.g., treat infection/metabolic derangement, reduce fever, treat exacerbating symptoms like insomnia and pain, limit/change sedating medications, etc.).

General Measures:

- Limit disrupting noise.
- Optimize sleep-wake pattern.
- Monitor hydration and nutrition.
- Reduce lines/tubes attached to patient as much as possible.
- Encourage mobility when possible.
- Minimize turning and invasive personal care as much as possible and consider medicating patient prior to necessary care.

Pharmacological Agents:

- **Haloperidol:** first-line treatment for patients with moderate to severe agitated delirium.
- **Olanzapine and Risperidone:** can be used if delirium persists for greater than 48 hours and is refractory to haloperidol.
- **Lorazepam:** If symptoms persist, can consider adding or replacing antipsychotics with lorazepam particularly if there is anxiety component.
 - May cause paradoxical delirium in older patients.

(See protocol on [next page](#))

Adult Dosing for Agitated Delirium

Haloperidol

PO: 1-2mg q4H PRN or schedule if delirium is constant

IV: 0.5mg-1mg q4H PRN or schedule if delirium is constant

Olanzapine (for persistent symptoms)

PO: 5mg QHS

Risperidone (for persistent symptoms)

PO: 1mg-2mg q8-12H PRN or scheduled

Lorazepam (for refractory symptoms or anxiety-related)

PO/IV: 0.5-1mg q6H PRN or scheduled

Pediatric Dosing for Agitated Delirium

Haloperidol

PO: 0.01 - 0.025 mg/kg/dose q8H PRN
(limited data, only for >3yrs)

Max 0.15 mg/kg/day

Lorazepam

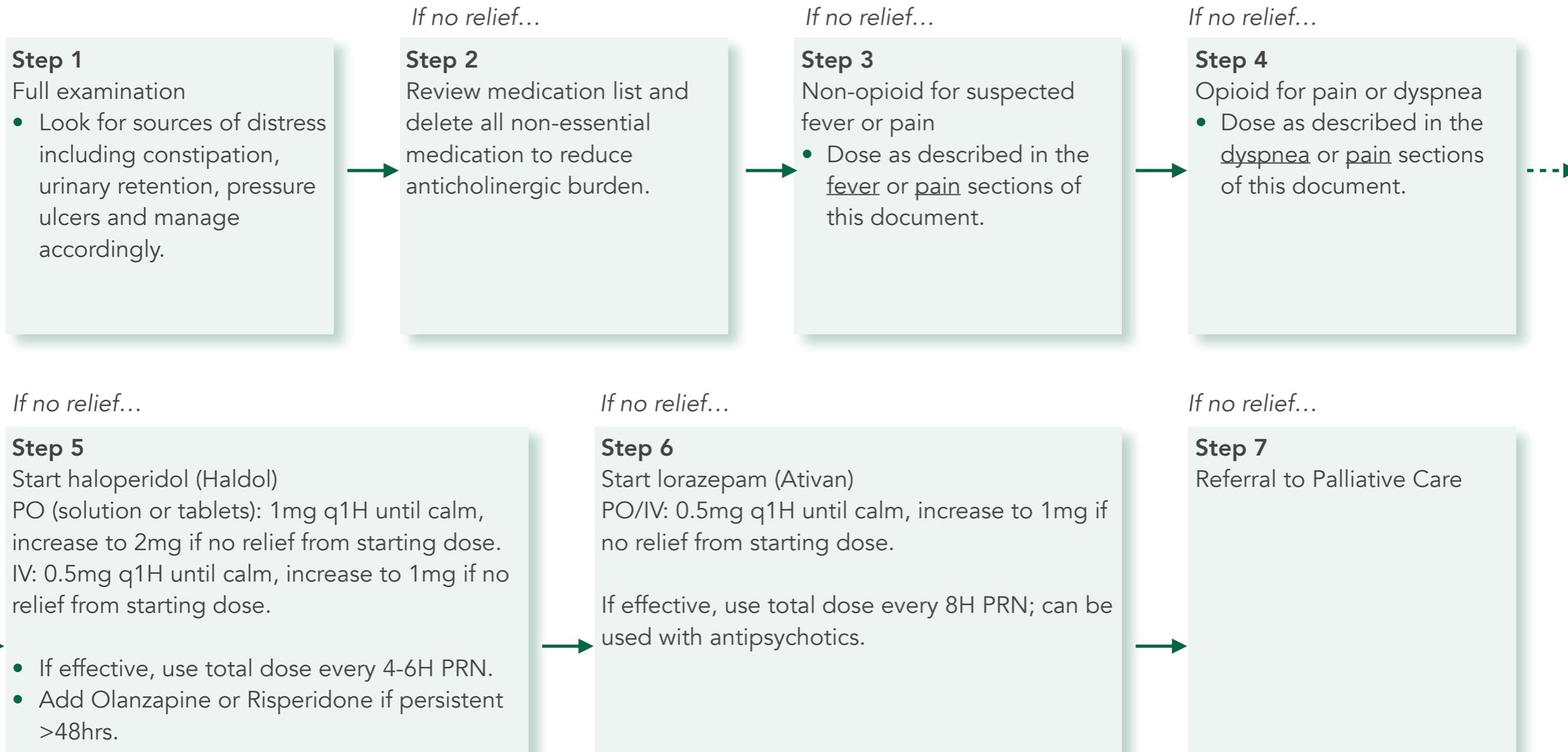
PO/IV: 0.02-0.05 mg/kg/dose q6H PRN

Max 2mg/dose



Symptom Management | Agitated Delirium

Acute Agitation/Delirium/Restlessness/Confusion Protocol



Symptom Management | At Home

For patients who wish to be managed at home.

COVID-19 Testing for Homebound Patients:

- Clinicians may call UVM Home Health and Hospice (or local home care services) to request home COVID-19 testing on patients who meet criteria and are currently receiving home health services.
- Purpose of test may be to support further conversations about prognosis, goals of care and care plan options.

Hospice Referrals:

- Clinicians can place a hospice referral for any patient chronically or seriously ill patients with COVID-19 symptoms or illness who has decided to forego hospitalization.
- If urgent referral – call hospice medical director ([see page 31](#))

Comfort medications/ "comfort kits"

- Clinicians could consider ordering comfort medications alongside hospice referral if patient is seriously ill, having symptoms of COVID-19, and goals are consistent with a "do not hospitalize" and comfort-directed plan of care.
- Comfort medications can be e-prescribed to most local pharmacies.
 - For those with Epic access: Order Standard Hospice Comfort Care Orders (AKA End Of Life)
- Home health and hospice staff can complete the opioid consent form in the home.

Note: Morphine Intensol (20mg/ml) dosing should be reviewed with patients/families by physician, pharmacist or home health/hospice nurse due to high concentration and risk of dosing error.

Opioid prescriptions overnight or on weekends

- Opioid prescriptions can be called in verbally for a 3 day emergency supply. Hard copy of Rx must follow. Identify that the prescription is for hospice or palliative purposes.
- The inpatient pharmacy provides emergency prescription fills to hospice staff overnight when needed. This can be coordinated with the hospice medical director on call if needed.

If a person has an expected death at home and is not receiving home health or hospice care:

- Please coach family or caregivers to contact 9-1-1 with request for a death pronouncement (for an expected death).
- EMS or law enforcement will initiate the process for death pronouncement.
- Provide your contact information to family to facilitate communication with EMS and reporting of pronouncement time.

Comfort Kits for Home Hospice Patients

Morphine Oral Solution (20 mg/ml):** 2-10 mg PO q 30min PRN pain, SOB, 10-20 for severe symptoms, 30 ml

Lorazepam 0.5 mg tablet: 1-2 tabs q2H PO PRN anxiety

Haldol 0.5 mg tablet: 1-2 tabs PO q4H PRN delirium, nausea

Hyoscyamine 0.125 mg: 1-2 tabs SL q4H PRN secretions

Bisacodyl 10 mg Suppository: 1 sup PR daily PRN constipation

*** Alternative opioids may be substituted in case of morphine allergy or renal disease with CrCl<30. Refer to [general opioids information section](#) if required*

Symptom Management | End of Life Care

End of life care generally refers to caring for a patient in the final hours to days of life. Important aspects in caring for a patient at the end of life include intense symptom management, clear and empathic communication with families, and ensuring psychosocial and spiritual support for both the patient and family. **Good palliative care (or at the end of life, hospice care) does not hasten death.**

The Dying Process

- Early in the dying process, patients will be bed-bound, have decreased oral intake and on/off wakefulness.
- For COVID-19 infections, respiratory patterns may start with rapid shallow breathing with cough and may progress to periods of irregular breathing with apnea.
- The last stages of dying will include comatose, cooling of limbs, mottled skin, and longer pauses with breathing.
- Clinicians can help patient's loved ones by providing education of the dying process, reassurance, and responding to emotions.

Dyspnea and Pain For Patients Unable to Report Symptoms

- Treat physical signs of increased work of breathing including use of accessory muscles, tripod positioning, grimacing, and tearfulness or moaning.
- Remember that respiratory rate can be variable depending on physiologic conditions (i.e., acidosis or increased ICP creates change in respiratory rate), and treating to reduce respiratory rate alone without signs of increased work of breathing is not clinically indicated.

Using Infusions for Dyspnea or Pain at the End of Life

- Infusions can take up to 20 hours to reach steady state and thus are not effective for managing acute symptoms.

- Boluses can be given every 15 minutes and more rapidly titrated to achieve better symptom control.
- Even if an infusion or scheduled dosing is started, always continue to use PRN doses for acute symptoms.
- Clinicians may choose to begin opioid infusions for patients dying from COVID-19 infections earlier than in other diseases to minimize exposure to the virus.

Starting Infusions:

- If more than 6 PRNs in a 4 hour period:
 - Calculate opioid total in 4 hours and divide by 4 (or total PRN/# hours) for initial infusion rate. Consider reducing initial rate by 25-50% if concerned.
- If a patient is on a long-acting opioid, can no longer take oral, and it is appropriate to consider an infusion:
 - Calculate total long acting opioid and divide by 24 then convert to IV equivalent. Consider reducing by 50% for initial infusion rate.
- Once infusion rate is determined, add PRN as 10% of daily total or roughly twice the infusion rate.

Titrating Infusions:

- For actively dying patients, we recommend that opioid infusions not be increased more frequently than every 4 hours.
 - **Instead, use boluses every 15min to achieve symptom relief.**
- Increases can be made by calculating total PRN over/# hours (usually 12-24H), then adding 50-75% of this number to the current infusion rate.
 - For each increase, do not increase more than 100% of the previous infusion rate as this can exacerbate side effects.

Symptom Management | End of Life Care

Dyspnea/Pain Management for Patients Who Are Taking Oral Medications

If able to take oral medication and experiencing mild to moderate symptoms or in outpatient setting. Note that oral/SL medicines must still be absorbed in the GI tract (by swallow or trickle) and all take 1 hour to peak in effect.

Protocol for Opioid Naïve Patients:

Use morphine if GFR >30, if not consider hydromorphone.

Step 1

- Start oral morphine 5mg SL q30min PRN.
- For frail or elderly patients consider halving dose.

If no relief after 30min...



Step 2

- Repeat same dose from Step 1.

If no relief after 30min...



Step 3

- Increase dose by 50-100%.
- If effective make higher dose available every 30min PRN.

If no relief after 30min...



Step 4

- Repeat same dose from Step 3.
- If dyspnea/pain are constant and requiring regular PRNs: schedule effective oral dose q4H and add PRN dose q30min (10% of daily total)
- If oral route is compromised at home, hospice team can facilitate use of: subcutaneous opioid infusion, transdermal fentanyl, or rectal opioids ([see p28 for iv/sq protocol](#))
- Consider obtaining SQ/IV access in the nursing home or hospital setting ([see p28 for iv/sq protocol](#)).
- Consider calling palliative care or hospice specialist ([see contact list on p32](#)).

Protocol for Patients Already Taking Opioids:

Use morphine if GFR >30, if not consider hydromorphone.

Step 1:

- Calculate 24 hour total use and start 10% of total q30min PRN.
- If no 24-hour data make home PRN dose available q30min PRN.

If no relief after 30 min...



Step 2

- Repeat same dose from Step 1.

If no relief after 30min...



Step 3

- Increase dose by 50-100%
- If effective make Step 3 dose available every 30min PRN.
 - Repeat this same dose if needed.
 - If dyspnea/pain are constant and requiring regular PRNs: schedule effective oral dose q4H and add PRN dose q30min (10% of daily total)
 - If oral route is compromised in the home setting, hospice team will facilitate use of: subcutaneous opioid infusion, transdermal fentanyl, or rectal opioids.
 - Consider obtaining SQ/IV access in the nursing home or hospital setting ([see p28 for iv/sq protocol](#)).
 - Consider calling palliative care or hospice specialist ([see contact list on p32](#)).

Symptom Management | End of Life Care

Dyspnea/Pain Management for Patients Who Require IV/SQ

If unable to use oral route or significant symptoms recommend IV or SQ. Note that if oral only available with significant symptoms start with above oral dosing, dosing q30min PRN (prior to peak) and if able try to obtain SQ access. IV/SQ peak in 15 min. (if respiratory distress, [see p29](#))

Protocol for Opioid Naïve Patients:

Use morphine if GFR >30, if not consider hydromorphone.

Step 1

- Start morphine 2mg IV/SQ
- If effective make 2mg q15min PRN available

If no relief after 15min...



Step 2

- Repeat same dose from Step 1.

If no relief after 15min...



Step 3

- Increase dose 50-100% if unrelieved
- If effective make higher dose available every 15min PRN

If no relief after 15min...



Step 4

- Repeat same dose from Step 3.
- Consider calling a palliative care or hospice specialist
- If dyspnea/pain are constant and requiring regular PRNs: Schedule IV dose q4hr or consider infusion ([see infusion guidelines on p26](#)) and add a IV PRN dose q15min (10% of daily total).

Protocol for Patients Already Taking Opioids:

Use morphine if GFR >30, if not consider hydromorphone.

Step 1:

- Calculate 24 hour total use and start q15min PRN of 10% of total. May need to convert oral dosing to IV (See Palliative Care Covid-19 Toolkit for conversions)
- If no 24-hour data make home PRN dose available q15min PRN

If no relief after 15min...



Step 2

- Repeat same dose from Step 1.

If no relief after 15min...



Step 3

- Increase dose 50-100% if unrelieved.
- Repeat same dose if needed.
- If dyspnea/pain are constant and requiring regular PRNs: Schedule IV dose q4hr or consider infusion ([see infusion guidelines on p26](#)) and add a IV PRN dose q15min (10% of daily total).
- Consider calling a palliative care or hospice specialist.

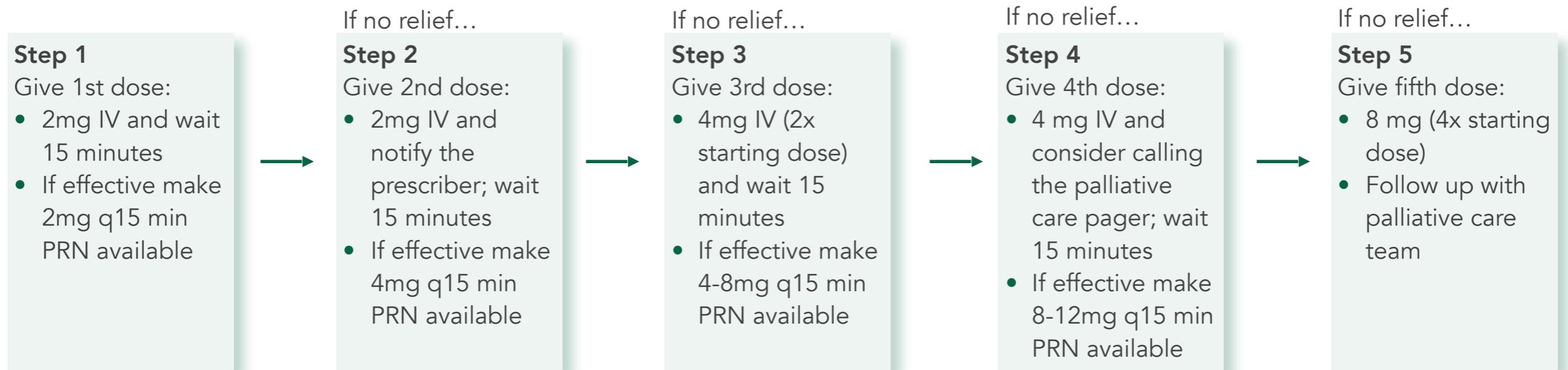
Symptom Management | Symptom Crisis

Dyspnea/Pain Crisis: for severe respiratory/pain crisis at the End of Life

Administer IV or SQ opioids as follows:

(Doses below are based on opioid naïve patient, doses may differ for opioid tolerant patients; example below is for morphine but hydromorphone and fentanyl can also be used)

Note: If working to obtain IV/SQ access start with oral doses q30 min PRN



Note: At some institutions, an “End of Life Order Set” is available. It is recommended that clinicians take into account the above information considering pharmacokinetics and the most recent regimen to determine whether the order set is appropriate or needs to be tailored further for the specific patient.

Actively Dying Pediatric Patients

If guidance is needed for actively dying children, please call the Palliative Care team for dosing specifics.



When To Call A Palliative Care Specialist



Specialist Palliative Care for COVID-19

Palliative Care remains a resource for primary care providers and inpatient teams for consultation regarding difficult symptom management and complex medical decision making.

The COVID-19 pandemic will likely pose challenging questions and prompt difficult conversations and choices. While triage decisions about resource allocation, if needed, will be made at the institutional level, we are available for the following needs:

- **Physical symptoms** that are either difficult to control or refractory to basic management;
- **Difficult decisions and discussions** regarding goals of care after initial attempts by primary team;
- **Challenging communication** issues with patients and/or caregivers; refractory emotional or spiritual distress in persons grappling with meaning, purpose, and connection;
- **Caregiver or team distress** that have not improved after initial attempts to console; or,
- **Inter- or intra- team conflicts** that are refractory to initial attempts to mediate.



Calling a Palliative Care Specialist

Contacts: How to Reach Palliative Care or Hospice Services

<i>Location</i>	<i>for Patients at Home (Weekdays)</i>	<i>for Patients in the Hospital (Weekdays)</i>	<i>Nights & Weekends</i>
UVM Medical Center Division of Palliative Medicine		Contact COVID PC clinician at: 802-847-9944 or page through PAS: 802-847-2700	Page on-call clinician through PAS: 802-847-2700
UVM Home Health and Hospice	New hospice referrals: 802-658-1900 Home palliative care, call clinical team: 802-860-4410		Page on-call Hospice Medical Director through PAS: 802-847-2700
Central Vermont Medical Center Palliative and Spiritual Care Team	Page Dr. Jonna Goulding: 802-452-7806	Page Elaine Hafter: 802-452-7949	Page Dr. Jonna Goulding: 802-452-7806
Porter Hospital Palliative Care Team	Page Dr. Diana Barnard through PAS: 802-847-2700	Call Taylor Zak: 802-388-4782	Page Dr. Diana Barnard through PAS: 802-847-2700
Champlain Valley Physicians Hospital Palliative Care Team		Call clinical team: 518-562-7998	Use on call hospitalist

Appendix



- Prognostication in COVID-19
- General Opioid Information
- Empathetic Continuers
- References

Appendix | Prognostication in COVID-19

The vast majority of the patients infected with COVID-19 will survive the illness and will not need hospitalization.

Estimated Survival

Overall case fatality is around 2.3 percent.

- Older adults: risk of morbidity and mortality increases with age.
 - Ages 70-79, mortality rate 8-15%.
 - Ages 80+, mortality rate 15-20%.
- Nursing Home Patients: out of one study from Washington.
 - 55% of nursing home patients required hospitalization.
 - 35% of nursing home patients died.
- ICU Patients:
 - 10-20% of patients who are hospitalized are transferred to the ICU.
 - Mortality rate for ICU patients ranges from 17-52%.
- Ventilated Patients:
 - Mortality rate is somewhere between 50%-90% depending on the study. Note that many patients in these studies were placed on non-invasive mechanical ventilation first.
 - Patients may require ventilation for up to 15-20 days if they survive.

Calculators Used for Prognosis

- SOFA Score: Used to determine level of acuity and mortality for patients in the ICU.
- mSOFA Score: Modified version of SOFA that uses less labs to determine overall mortality.
- Brescia-COVID Respiratory Severity Scale: Developed in Italy to determine severity of patients with COVID-19 infection.

Risk Factors for Morbidity and Mortality

Epidemiological Risk Factors

Age > 55-60, worse >70

Chronic Pulmonary Disease

Chronic Kidney Disease

Diabetes

Hypertension

BMI >40

Coronary Artery Disease

Immunosuppression and HIV

Vital Signs

Respiratory rate >24 breaths/min

Heart rate >125 beats/min

Oxygen saturation <90% on room air

Lab Values

Absolute lymphocyte count <0.8

Neutrophil/lymphocyte ratio >3

Ferritin >300 ug/L

D-dimer > 1000ng/ml

LDH > 245 IU/L

C-reactive protein >100

Appendix | General Opioid Information

- Morphine is generally the first line, unless renal impairment (GFR<30) or allergy.
- If a patient has renal impairment consider use of hydromorphone or IV boluses of fentanyl.
 - Note: hydromorphone can still cause neurotoxicity in renal failure but does so less than morphine.
- Opioids are the gold standard treatment of dyspnea refractory to optimization of underlying disease. Medication should be titrated to feeling of dyspnea or physical exam (e.g. work of breathing).

Understanding pharmacokinetics is essential for good symptom control

- Liquid forms of morphine/oxycodone/hydromorphone are all absorbed in the gut, not via oral mucous membranes (buccal).
- Oral forms of medication can take 1 hour to reach peak effect.
- IV forms of medication can reach peak effect in 15 minutes.
- Subcutaneous forms of medication can reach peak in 20-30 minutes.
- Infusions take multiple hours (up to 20) to achieve a steady state.

Table 1. Opioid Conversions

<i>Drug Name</i>	<i>Oral Dose (mg)</i>	<i>Intravenous Dose (mg)</i>
Morphine	30	10
Oxycodone	20	n/a
Hydromorphone	7.5	1.5
Fentanyl	n/a	0.1 (100mcg)

Table 2. Starting Doses in the Opioid–Naïve Patient for Dyspnea

<i>Drug Name</i>	<i>Oral Dose (mg)</i>	<i>Intravenous Dose (mg)</i>
Morphine	5-7.5mg	1-2mg
Hydromorphone	1-2mg	0.2-0.4mg
Oxycodone	2.5mg	--

Appendix | Empathic Continuers (NURSE)

	<i>Example</i>	<i>Notes</i>
<p>Naming Name the emotion you see in front of you</p>	<p>"You seem upset"</p> <p>"This must be overwhelming"</p>	<p>In general, turn down the intensity a notch when you name the emotion.</p> <p>You can also name the mention of the situation, "this is really sad"</p>
<p>Understanding Try to put yourself in their shoes</p>	<p>"I can't begin to understand how hard this has been"</p> <p>"I can't imagine what you are going through"</p>	<p>Think of this as another kind of acknowledgment, but stop short of suggesting you understand everything (you don't).</p>
<p>Respecting Demonstrate respect for the person in front of you</p>	<p>"I can see how hard you have been working to stay healthy"</p> <p>"I can see what an amazing advocate you are for your mother"</p>	<p>Remember that praise also fits in here, e.g. "I think you have done a great job with this".</p>
<p>Supporting Demonstrate your ongoing support</p>	<p>"I will do my best to make sure you have what you need"</p> <p>"We will be here for you"</p>	<p>Making this kind of commitment is a powerful statement.</p>
<p>Explore Learn more about what the person is feeling, especially if you don't understand</p>	<p>"Tell me more"</p> <p>"Could you say more about what you mean when you say..."</p>	<p>If it's a cognitive way of expressing emotion, explore why they ask the question.</p>

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Images: Courtesy of *Hush Naidoo*; *CDC*; *Fusion Medical Animation*, and *Adobe*.