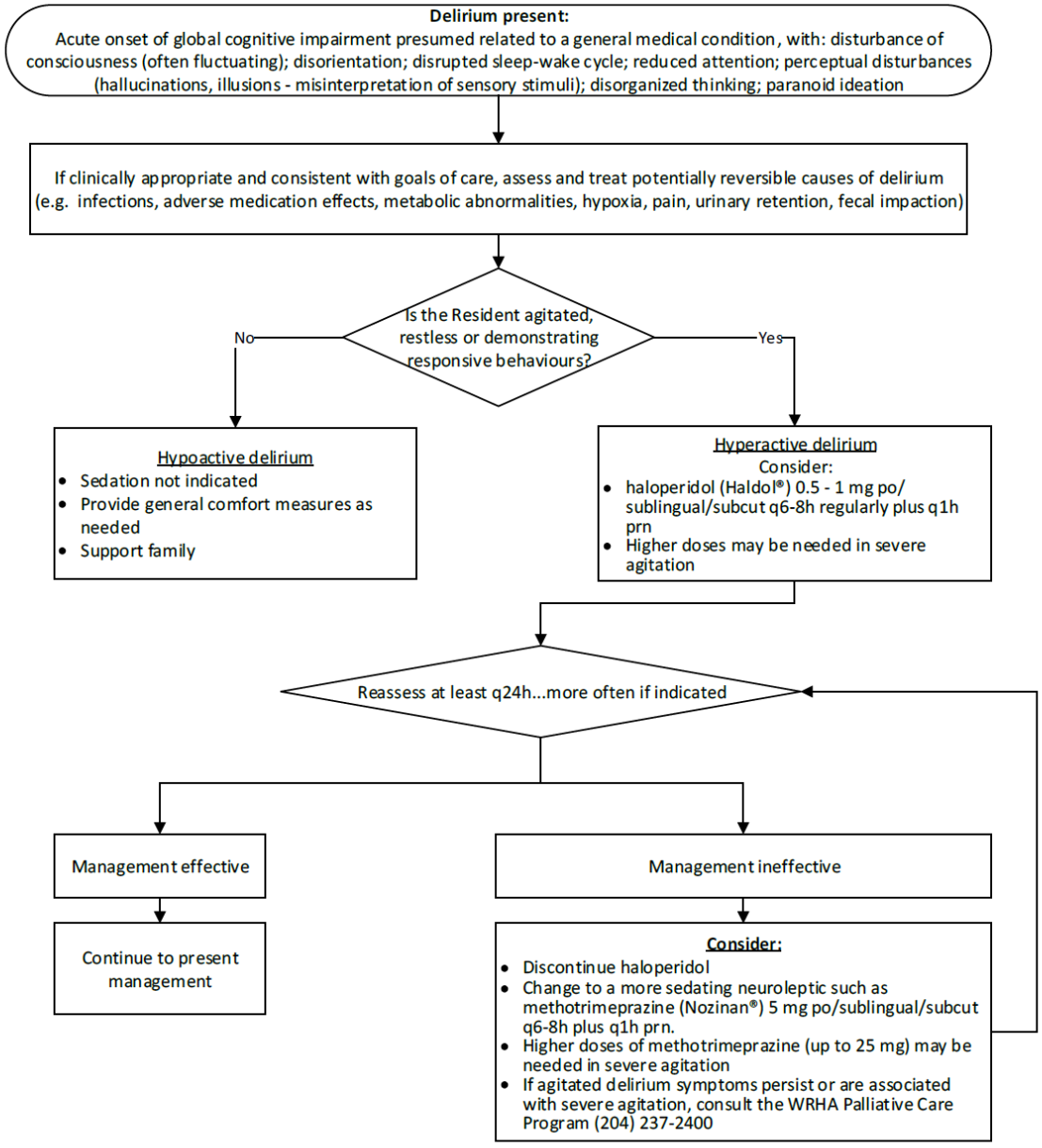
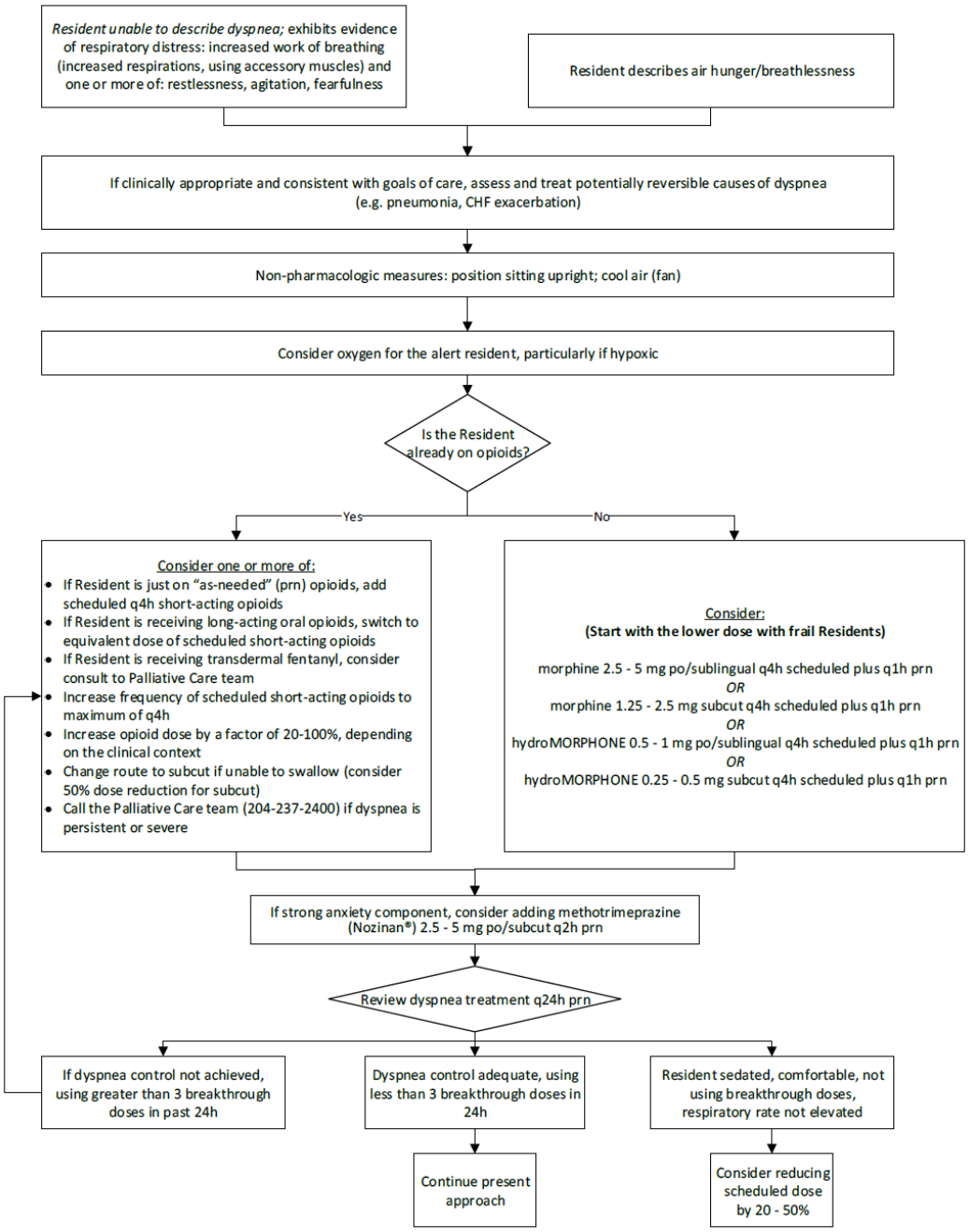
Pathway A

Agitated Delirium Management in the Final Days of Life



Pathway B

Dyspnea Management in the Final Days of Life

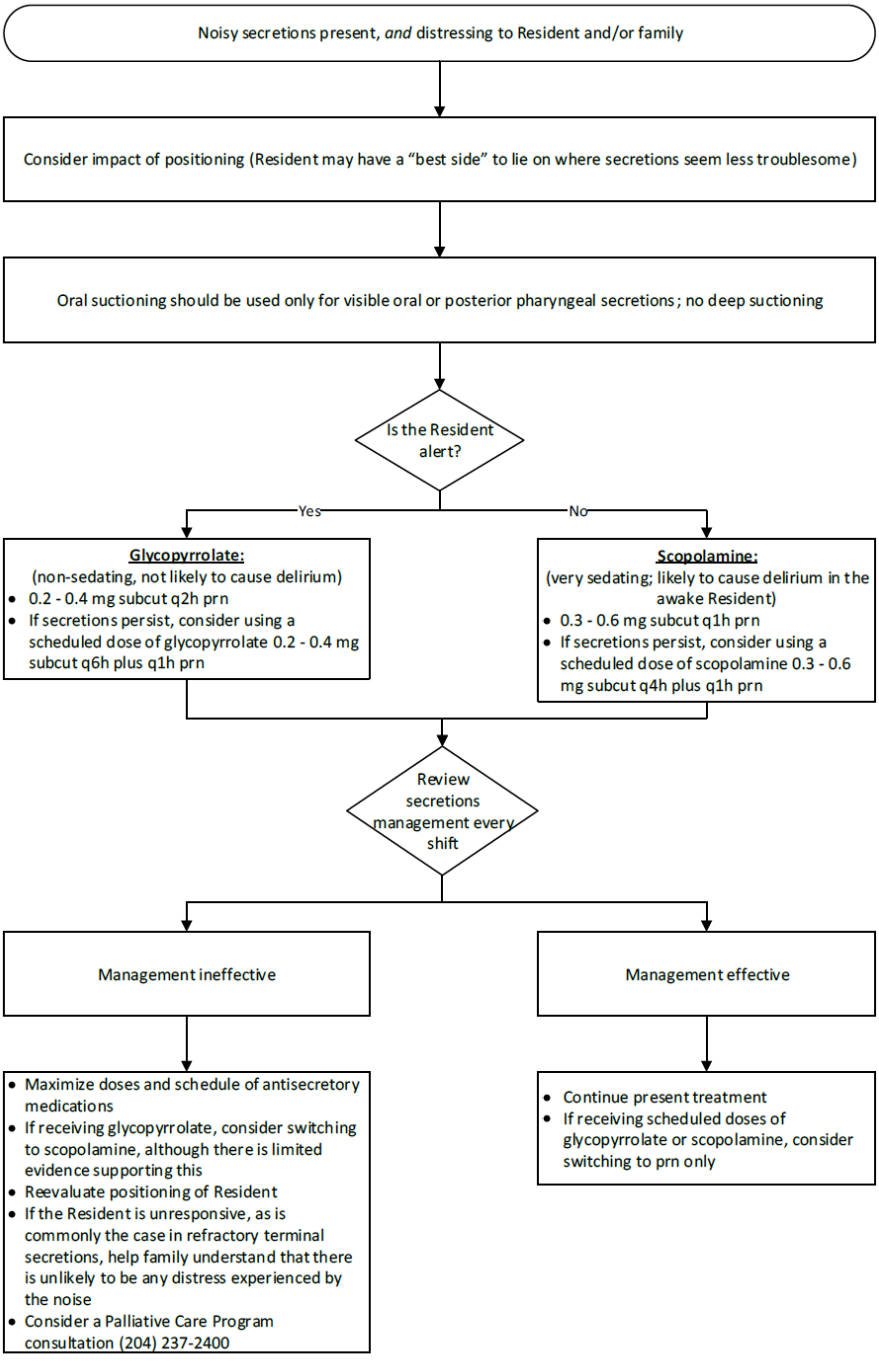


Notes:

- Consult the Palliative Care Program (204) 237-2400 if symptoms are complex, persistent, or if converting potent or high dose opioids.

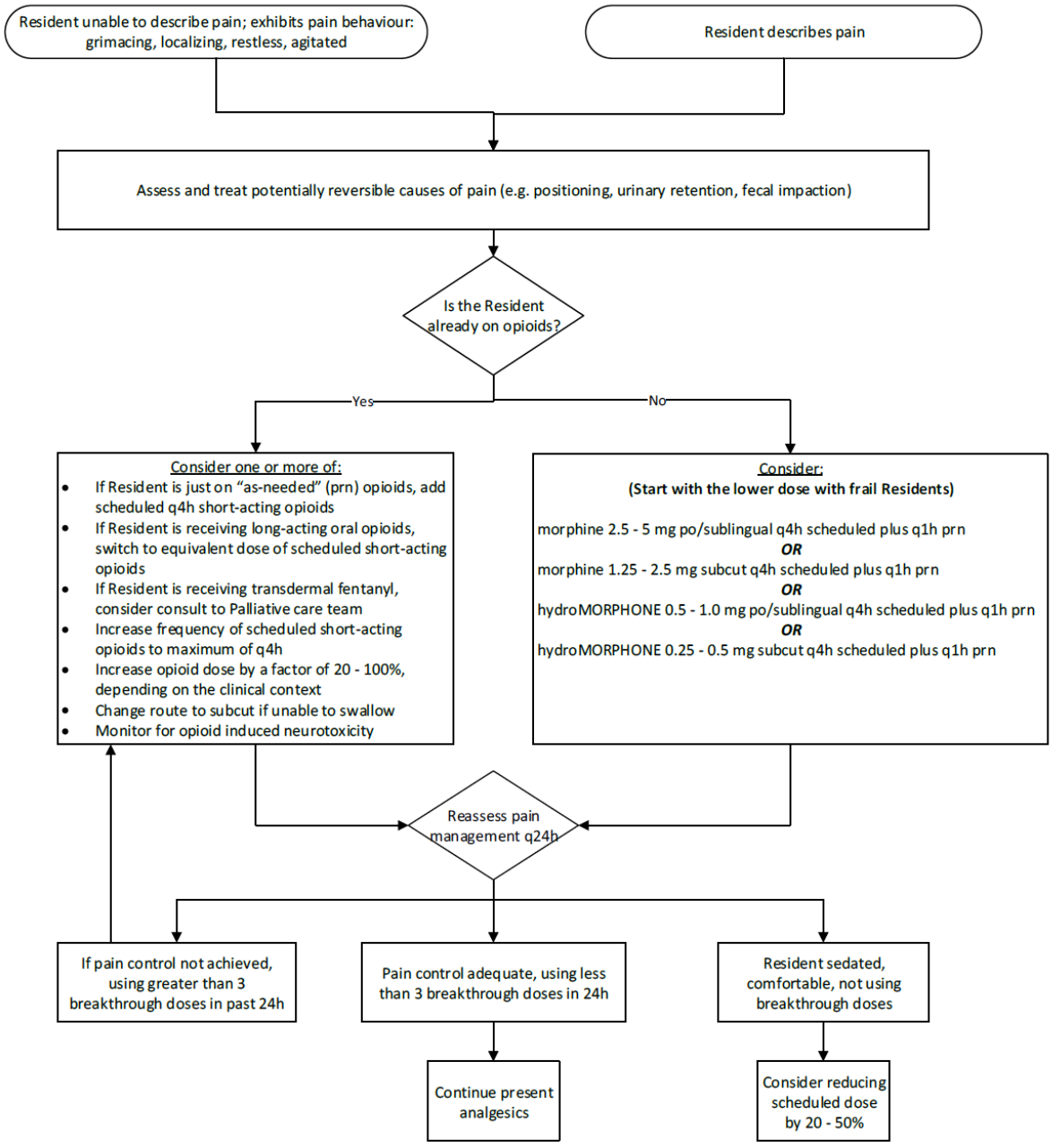
Pathway C

Noisy Secretions Management in the Final Days of Life



Pathway D

Pain Management in the Final Days of Life

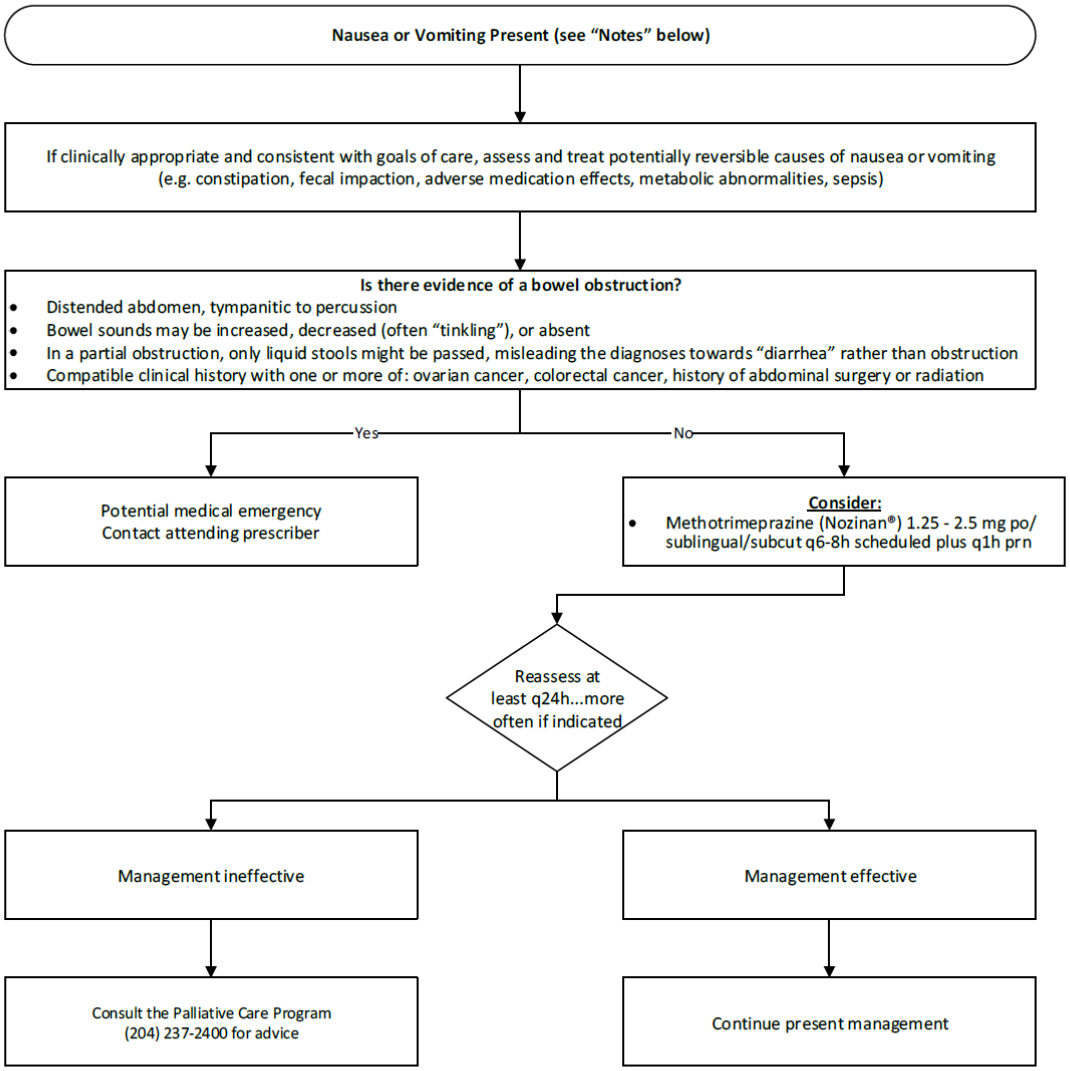


Notes:

- Consult the Palliative Care Program (204) 237-2400 if symptoms are complex, persistent, or if converting potent or high dose opioids.
- For further information refer to: WRHA Pain Assessment and Management Clinical Practice Guidelines; WRHA LTC Program Pain Assessment and Monitoring Operational Directive

Pathway E

Nausea or Vomiting Management in the Final Days of Life



Notes:

- Not all Residents with nausea will vomit and not all vomiting is accompanied by nausea
- Gastrointestinal obstruction may cause vomiting with minimal nausea, particularly in proximal obstruction. Antinauseant medications may be ineffective in such circumstances.
- Central disorders (e.g. brain tumor, vestibular conditions) and systemic conditions (e.g. renal or liver failure, metabolic disturbances, and medication adverse effects) tend to be accompanied by nausea with or without vomiting. Antinauseant medications are most effective in such circumstances.

Pathways adapted from Alberta Health Services' Seniors End of Life Care Pathway by Dr. M. Harlos et al. 2012
Updated by the LTC End of Life Care Working Group in consultation with Dr. M. Harlos: November 2013
Approved by the LTC Medical Director Advisory Committee: April 17, 2014

Resource Guide A

Medications for Symptom Management at End of Life

General Principles

- Review medication allergies or intolerances prior to starting a new medication
- The doses below are conservative starting doses because of the uncertainty about how the medications will be tolerated. The medications may need to be escalated, as guided by clinical effectiveness, particularly when using opioids to relieve dyspnea or sedatives in agitated delirium

Routes of Administration

- Oral
  - Preferred route when available
  - In addition to tablets or capsules, liquid preparations may be available
- Sublingual
  - Uses small volumes (< 2mL) of concentrated preparations
  - These small volumes may be swallowed reflexively and their bioavailability would be similar to the oral route
- Subcutaneous (subcut)
  - Intermittent administration into the subcutaneous tissue via indwelling cannula
  - More information: WHRA LTC Program Operational Directives "*Subcutaneous Cannula (Indwelling): Insertion and Removal*" and "*Subcutaneous Cannula (Indwelling): Medication Administration*"
- Intravenous: not routinely used in the LTC setting
- Intramuscular: not well tolerated; use subcutaneous route instead
- Rectal: not well tolerated

Opioid Analgesics

- The Resident is assumed to be opioid naïve in the doses suggested below. For Residents already on opioids, their existing tolerance will need to be considered
- Opioids given by the subcutaneous route are twice as potent as the oral route; reduce dose by 50% when switching from oral to subcutaneous
- Breakthrough doses should be at least 10% of the total daily opioid dose, or equal to the regular q4h dose
- Adverse effects of opioids include: sedation, constipation, delirium, and respiratory depression (rare when opioids are titrated in proportion to distress)
- **Opioid-induced neurotoxicity**:
  - Typically results from accumulation of morphine or hydroMORPHONE metabolites in the context of renal insufficiency. Symptoms include: sedation, delirium, myoclonus (which may progress to seizures), and generalized hyperalgesia. Rapid escalation of morphine or hydroMORPHONE doses, out of proportion to the previous pain history, may occur in response to the hyperalgesia. However, the opioids themselves are causing the hyperalgesia. This is a life-threatening emergency, and a Palliative Care Program physician should be immediately contacted through St. Boniface Hospital paging at (204) 237-2053.

Medication	Indications	Route	Starting Dose	Concentration	Frequency
MORPHINE	• Dyspnea - Pathway B • Pain Management – Pathway D	Oral or sublingual	2.5-5 mg	Solution: 5 mg/mL	q4h + q1h prn
		Subcut	1.25-2.5 mg	10 mg/mL; 1 mL	q4h + q1h prn
hydroMORPHONE (Dilaudid® equiv) ○ *5 to 7.5 times MORE potent than morphine* ○ *In renal insufficiency, consider hydroMORPHONE rather than morphine*	• Dyspnea - Pathway B • Pain Management – Pathway D	Oral or sublingual	0.5-1 mg	Solution: 1 mg/mL	q4h + q1h prn
		Subcut	0.25-0.5 mg	2 mg/mL; 1 mL	q4h + q1h prn

Other Medications

Medication	Indications	Route	Starting Dose	Concentration	Frequency
HALOPERIDOL (Haldol® equiv)	Agitated delirium – Pathway A	Oral or sublingual	0.5-1 mg	N/A	q6-8h prn + q1h prn
		Subcut	0.5-1 mg	5 mg/mL; 1 mL	q6-8h prn + q1h prn
GLYCOPYRROLATE ○ *Less likely to cause sedation and confusion than scopolamine*	Noisy secretions - Pathway C	Subcut	0.2-0.4 mg	0.2 mg/mL; 2 mL	q2hprn If secretions persist, q6h + q1h prn
SCOPOLAMINE ○ *Transdermal scopolamine (Transderm-V® equiv) delivers a relatively small dose at a slow rate; therefore the subcutaneous route is preferable for scopolamine*	Noisy secretions - Pathway C	Subcut	0.3-0.6 mg	0.6 mg/mL; 1 mL	q1hprn If secretions persist, q4h + q1h prn
METHOTRIMEPRAZINE (Nozinan® equiv) ○ *Agitated delirium: If haloperidol is not effective and a more sedating neuroleptic is required* ○ *Dyspnea: If there is a strong anxiety component*	Agitated delirium – Pathway A	Oral or sublingual	5 mg	N/A	q6-8h + q1h prn
		Subcut	5 mg	25 mg/mL; 1 mL	q6-8h + q1h prn
	Dyspnea – Pathway B	Oral or sublingual	2.5-5 mg	N/A	q2h prn
		Subcut	2.5-5 mg	25 mg/mL; 1 mL	q2h prn
	Nausea or Vomiting – Pathway E	Oral or sublingual	1.25-2.5 mg	N/A	q6-8h + q1h prn
		Subcut	1.25-2.5 mg	25 mg/mL; 1 mL	q6-8h + q1h prn

Adapted from "Medication for Symptom Management at End of Life in Long Term Care" by Dr. M. Harlos, 2012
Updated by the LTC End of Life Care Working Group in consultation with Dr. M. Harlos: November 2013
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