

Guidance for the Management of Symptoms in Adults in the Last Days of Life

This Guidance includes management of the following symptoms:

Pain

Nausea and vomiting

Dyspnoea

Noisy chest secretions / Death rattle

Agitation when death is imminent

- Please note that these recommendations should only be used for patients **in the last days of life** and should not be used outside this context.
- They are a GUIDE, and should be used as such. They may differ from other recommendations but have been chosen to reflect expert opinion, best evidence and safety.
- Users are advised to monitor patients carefully for side effects and response to treatment. Responsibility for the use of these recommendations lies with the healthcare professional(s) managing each patient.
- Seek specialist advice when necessary, especially in patients with complex needs.
- **When prescribing drugs, always start with the lowest dose in the range specified in this guide.**
- For patients with moderate to severe renal or hepatic impairment in the last days of life please seek specialist advice

Further information on symptom control at the end of life is available from your Hospital Specialist Palliative Care Team, your Trust intranet website, the Palliative Adult Network Guidelines (PANG) Book 2011 and the HSC Guidance “Approximate equivalent doses of opioid analgesics for adult use”

Management of Pain when patient unable to take oral analgesia

Patient currently does not have pain or pain is controlled by current prescription

No analgesia prescribed or PRN analgesia (Anticipatory prescribing) Prescribe for PRN use Morphine 2mg – 5mg SC 2-4hourly AND Review after 24hrs. If patient has required 2 or more doses consider prescribing up to this total Morphine dose SC via a syringe pump over 24 hours	Already on regular “weak” opioid (max dose) e.g.Co-codamol 30/500, Dihydrocodeine, Tramadol Prescribe Morphine 10mg-15mg SC via syringe pump over 24 hrs instead of current oral analgesia. AND Prescribe Morphine 2mg SC 2-4hourly PRN for breakthrough pain*	Already on Oral Morphine or other opioid (see Table 1) Use conversion Table 1 to change from total daily oral morphine to SC Morphine or other opioid. Prescribe via SC syringe pump over 24hrs. AND Prescribe breakthrough analgesia* i.e. divide total Morphine or other opioid dose by 6 and give 2-4hourly PRN	Already on Fentanyl (Mezolar), BuTrans or Transtec Patch Continue prescribing patch AND Prescribe SC Morphine for breakthrough pain* 2-4 hourly. (use conversion Table 2 for Fentanyl Patch. Seek specialist advice for other opioid patches)
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Patient currently experiencing pain

No regular analgesia prescribed Give stat SC PRN dose of Morphine 2mg– 5mg as above AND Prescribe Morphine 5mg – 10mg as a SC infusion via syringe pump over 24 hours AND Prescribe Morphine 2mg – 5mg SC 2-4hourly PRN for breakthrough pain* (This can be given more frequently with medical discussion and/or palliative care input)	Already on Oral Morphine or other opioid (See Table 1) Use Table 1 to change from total daily oral opioid dose to SC opioid. Give SC via syringe pump over 24 hours AND Prescribe for breakthrough pain* SC 2-4 hourly PRN i.e. divide new total daily SC opioid dose by 6. Give a stat dose. Review regularly If two or more PRN doses given in 24 hours increase syringe pump dose by 30% to 50% to control pain.	Already on Fentanyl Patch (Mezolar), BuTrans or Transtec Patch Give stat morphine sulphate SC PRN dose (use conversion Table 2) AND Continue prescribing patch AND Add additional Morphine (or other opioid) for uncontrolled pain as a SC infusion via syringe pump (equivalent of 2 breakthrough doses* of Morphine) AND Prescribe SC Morphine for breakthrough pain* ($\frac{1}{6}^{\text{th}}$ of total 24 hour opioid dose) and give 2-4hourly PRN Seek specialist advice for other opioid patches.
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* Breakthrough analgesia is usually worked out as $\frac{1}{6}^{\text{th}}$ of the total 24 hour opioid dose, but can also be given as $\frac{1}{10}^{\text{th}}$ of the total 24 hour opioid dose. Refer to BNF “Prescribing in Palliative Care” section.

If symptoms persist contact the Specialist Palliative Care Team in your area

Table 1 Opioid Conversions (Refer also to HSC Medicine Governance “Northern Ireland Guidelines on Converting Opioid Analgesics”)

<http://www.medicinesgovernance.hscni.net/joint-publications/medicines-safety-documents/opioids/>

Oral Codeine /Dihydrocodeine /Tramadol To: Oral Morphine	
Formula:	Divide total 24 hour dose by 10
Example: Oral codeine 60mg QDS = 240mg codeine = 24mg Oral Morphine	
Oral Morphine To: SC Morphine	
Formula:	Divide total 24 hour dose of Oral Morphine by 2
Example: Oral Morphine e.g. 60mg BD = 120mg/24hrs = SC Morphine 60mg/24hrs	
Oral Morphine To: SC Diamorphine	
Formula:	Divide total 24 hour dose of Oral Morphine by 3
Example: Oral Morphine e.g. 60mg BD = 120mg/24hrs = SC Diamorphine 40mg/24hrs	
Oral Morphine To: Oral Oxycodone	
Formula :	Divide total 24 hour Dose of Oral Morphine by 2
Example: Oral Morphine (MST)60mg BD = 120mg/24hrs = Oral Oxycodone 30mg BD	
Oral Oxycodone To: SC Oxycodone	
Formula:	Divide total 24 hour dose of Oxycodone by 2
Example: Oral Oxycodone 10mg BD = 20mg/24hrs = SC Oxycodone 10mg/24hrs	
Oral Morphine To: SC Alfentanil	
Alfentanil may be used in patients with severe renal impairment; seek specialist advice when necessary	
Formula:	Divide total 24 hour dose of Oral Morphine by 30
Example: Oral Morphine (MST) 60mg BD = 120mg/24hrs = SC Alfentanil 4mg/24hrs	

Table 2 Patient on Fentanyl Patch (Mezolar) requiring 2-4 hourly PRN Morphine for Breakthrough Pain

(Refer to HSC Guidance “Approximate equivalent doses of opioid analgesics for adult use” for oral morphine equivalent doses for Mezolar, BuTrans and Transtec patches)

Fentanyl Patch (Mezolar) Strength (micrograms/hr)	Breakthrough Pain Subcutaneous Morphine 2-4 hourly PRN dose (mg)
‘12’ patch	2 mg
‘25’ patch	5 mg
‘37’ patch	7 mg
‘50’ patch	10 mg
‘62’ patch	12 mg
‘75’ patch	15 mg
‘100’ patch	20 mg
‘125’ patch	25 mg
‘150’ patch	30 mg
‘175’ patch	35 mg
‘200’ patch	40 mg

If symptoms persist contact the Specialist Palliative Care Team in your area

Management of Nausea/ Vomiting

(When the patient is unable to take oral anti-emetics)

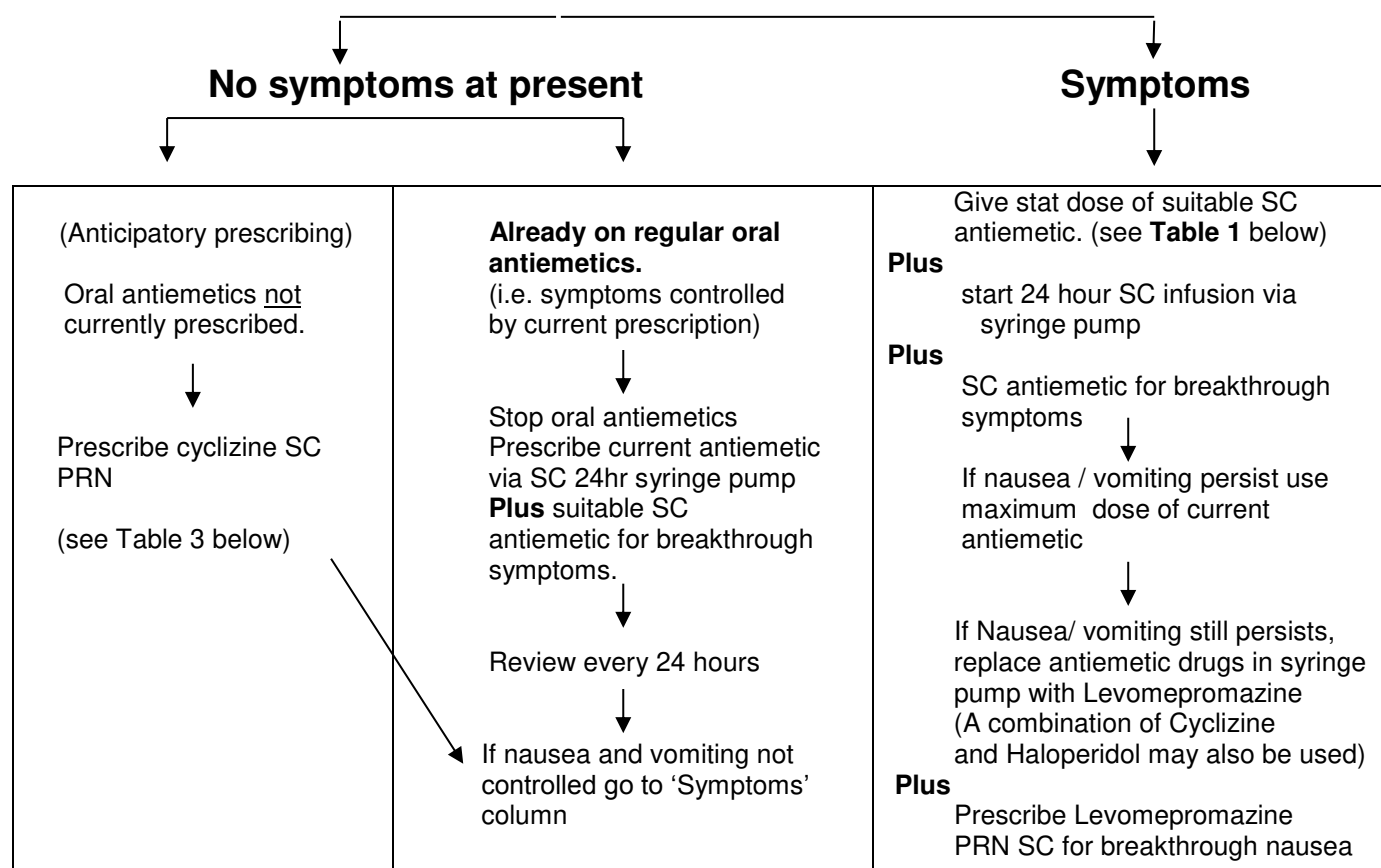


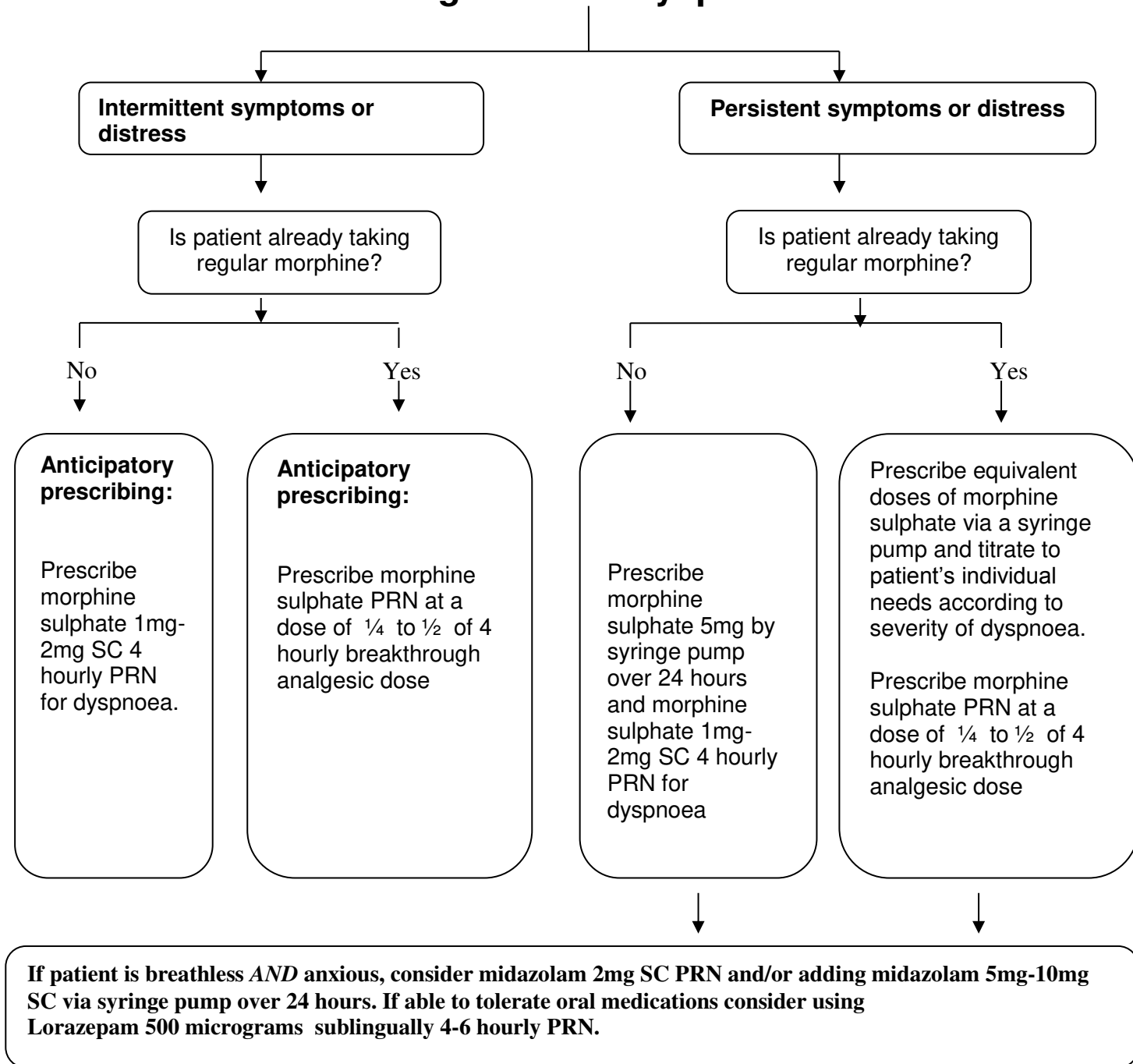
Table 3 Choice of antiemetic

	Drug	Indications for Use	SC stat prn dose	SC 24 hour dose range
First line	Cyclizine	Motion sickness. Mechanical bowel obstruction. Raised intracranial pressure.	50mg	100mg – 150mg
	Haloperidol	Chemical/Metabolic causes.	500 micrograms -1mg	1.5mg – 5mg*
	Metoclopramide	Gastric irritation / stasis (discontinue if colic develops) Prokinetic antiemetic	10mg	30mg –60mg*
Second line	Levomepromazine	Broad spectrum antiemetic (can cause sedation at high doses)	5mg	5mg - 25mg
Third line	Ondansetron	Surgery/Chemotherapy/ Radiotherapy induced. Intractable vomiting due to chemical, abdominal and cerebral causes when above approaches have failed	4mg - 8mg	8mg – 24mg

* Higher doses may be used in specialist practice. Contact the Hospital Palliative Care team for advice.

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Management of Dyspnoea



- Non pharmacological measures such as positioning and the use of a fan should be considered
- Consider reducing the drug, dose and frequency for patients who are elderly, frail or in renal failure
- For patients who are conscious and can tolerate oral medicines consider oral morphine sulphate in a dose equivalent to the SC doses recommended above
- **For patients on other opioids use Table 1 for opioid conversions and use guidance as above**

If symptoms persist contact the Specialist Palliative Care Team in your area

Management of Noisy Chest Secretions

(Review the use of intravenous or subcutaneous fluids and decrease or discontinue if appropriate.
Repositioning the patient may also help dislodge chest secretions)

No symptoms at present

Symptoms

(Anticipatory Prescribing)

Prescribe **Glycopyrronium**
200 micrograms SC 4-6hourly PRN

If two or more doses of PRN
Glycopyrronium required in 24
hours

Give stat dose **Glycopyrronium**
200 micrograms SC

AND

Prescribe **Glycopyrronium** 600 micrograms
SC over 24 hours via syringe pump

Prescribe **Glycopyrronium** 200 micrograms
SC 4-6hourly PRN for breakthrough symptoms

If symptoms persist, increase total 24 hour
dose to 1200 micrograms (1.2mg)

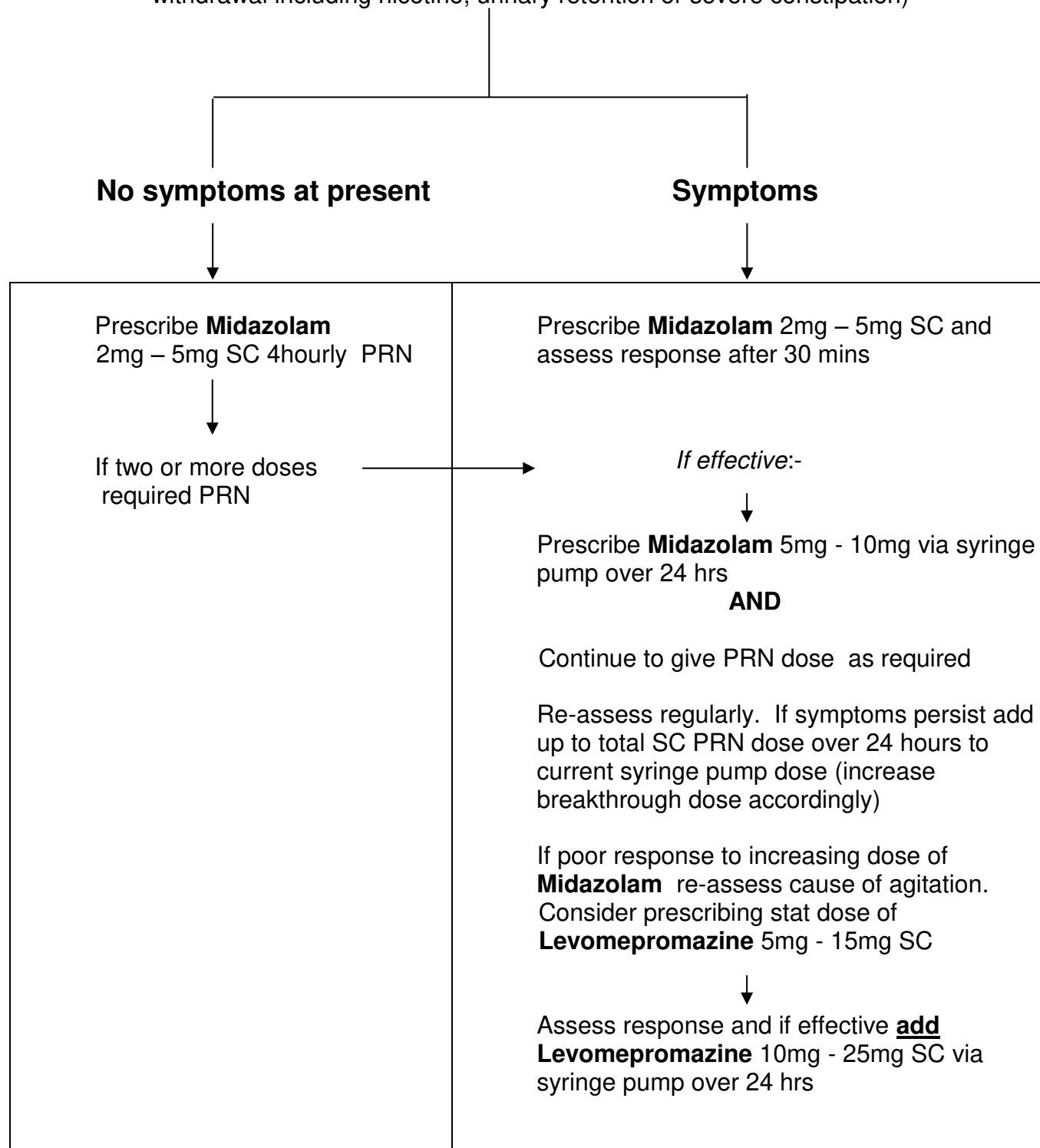
If 1200 micrograms in 24 hours not effective,
consider changing to **Hyoscine Butylbromide**
60mg or **Hyoscine Hydrobromide 2.4 mg** SC
over 24 hours via syringe pump*

**Hyoscine Hydrobromide may cause sedation and
paradoxical agitation)*

If symptoms persist contact the Specialist Palliative Care Team in your area

Management of Agitation When Death is Imminent

(Assess the patient first to exclude potentially reversible and treatable causes such as pain, drug withdrawal including nicotine, urinary retention or severe constipation)



If symptoms persist contact the Specialist Palliative Care Team in your area