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)	**Already on <u>regular</u> "weak" opioid (max dose)** e.g.Co-codamol 30/500, Dihydrocodeine, Tramadol	**Already on Oral Morphine or other opioid (see Table 1)**	**Already on Fentanyl (Mezolar), BuTrans or Transtec Patch**
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	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*	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	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)

Patient currently experiencing pain

No regular analgesia prescribed	**Already on Oral Morphine or other opioid (See Table 1)**	**Already on Fentanyl Patch (Mezolar), BuTrans or Transtec Patch**
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)	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.	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* ($1/6^{th}$ of **total** 24 hour opioid dose) and give 2-4hourly PRN Seek specialist advice for other opioid patches.

***** Breakthrough analgesia is usually worked out as $1/6^{th}$ of the total 24 hour opioid dose, but can also be given as $1/10^{th}$ 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 Morpine 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 **Diamorphin**e 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)

No symptoms at present

(Anticipatory prescribing)

Oral antiemetics not currently prescribed.

↓

Prescribe cyclizine SC PRN

(see Table 3 below)

Already on regular oral antiemetics.
(i.e. symptoms controlled by current prescription)

↓

Stop oral antiemetics
Prescribe current antiemetic via SC 24hr syringe pump
Plus suitable SC antiemetic for breakthrough symptoms.

↓

Review every 24 hours

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If nausea and vomiting not controlled go to 'Symptoms' column

Symptoms

Give stat dose of suitable SC antiemetic. (see **Table 1** below)

Plus

start 24 hour SC infusion via syringe pump

Plus

SC antiemetic for breakthrough symptoms

↓

If nausea / vomiting persist use maximum dose of current antiemetic

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If Nausea/ vomiting still persists, replace antiemetic drugs in syringe pump with Levomepromazine
(A combination of Cyclizine and Haloperidol may also be used)

Plus

Prescribe Levomepromazine PRN SC for breakthrough nausea

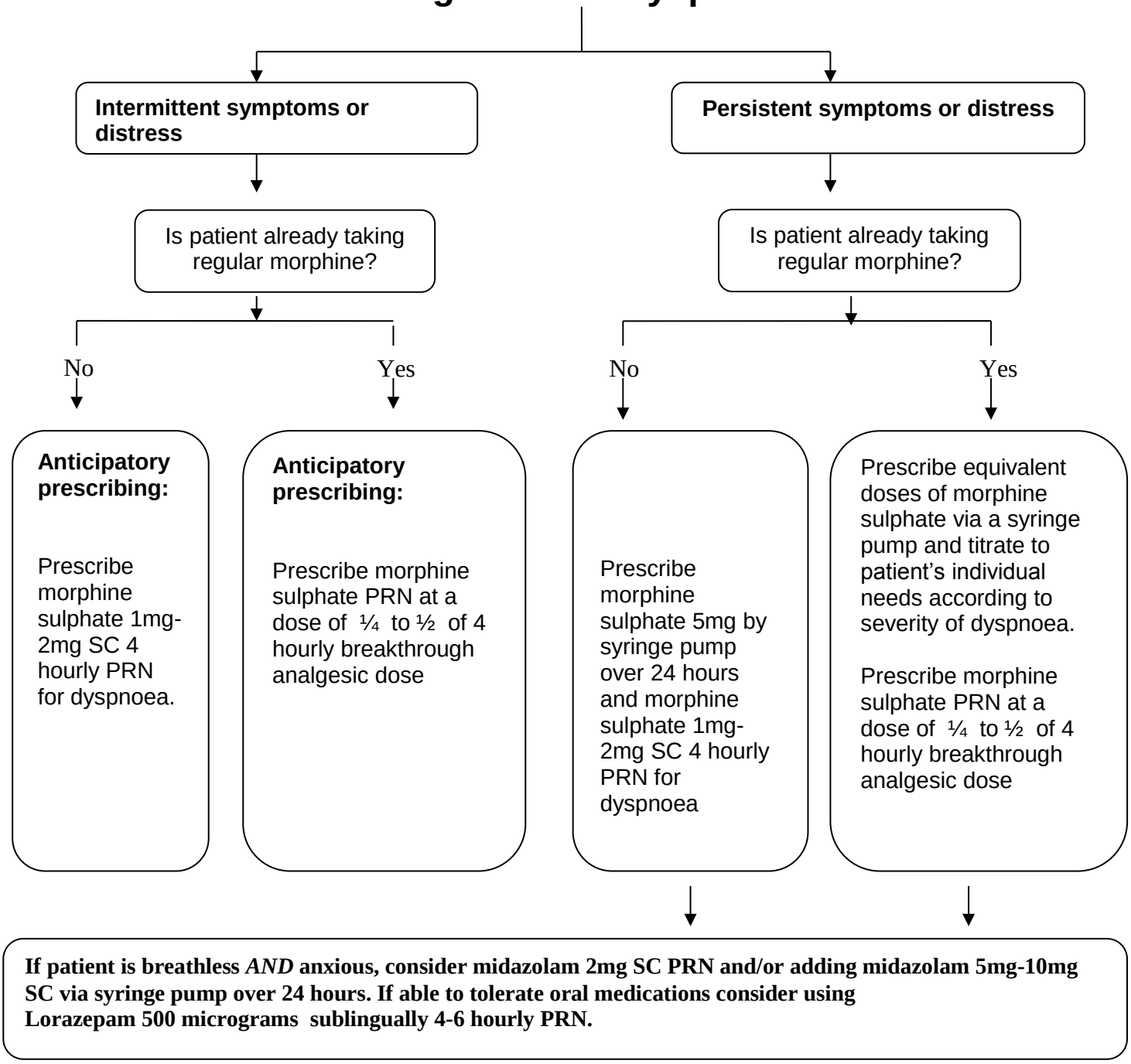
Table 3 Choice of antiemetic

	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.**

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

Management of Dyspnoea



If patient is breathless *AND* anxious, consider midazolam 2mg SC PRN and/or adding midazolam 5mg-10mg SC via syringe pump over 24 hours. If able to tolerate oral medications consider using Lorazepam 500 micrograms sublingually 4-6 hourly PRN.

- 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)

No symptoms at present

Prescribe **Midazolam** 2mg – 5mg SC 4hourly PRN

If two or more doses required PRN → *If effective*:-

Prescribe **Midazolam** 5mg - 10mg via syringe pump over 24 hrs

AND

Continue to give PRN dose as required

Re-assess regularly. If symptoms persist add up to total SC PRN dose over 24 hours to current syringe pump dose (increase breakthrough dose accordingly)

If poor response to increasing dose of **Midazolam** re-assess cause of agitation. Consider prescribing stat dose of **Levomepromazine** 5mg - 15mg SC

Assess response and if effective **<u>add</u>** **Levomepromazine** 10mg - 25mg SC via syringe pump over 24 hrs

Symptoms

Prescribe **Midazolam** 2mg – 5mg SC and assess response after 30 mins

If effective:-

Prescribe **Midazolam** 5mg - 10mg via syringe pump over 24 hrs

AND

Continue to give PRN dose as required

Re-assess regularly. If symptoms persist add up to total SC PRN dose over 24 hours to current syringe pump dose (increase breakthrough dose accordingly)

If poor response to increasing dose of **Midazolam** re-assess cause of agitation. Consider prescribing stat dose of **Levomepromazine** 5mg - 15mg SC

Assess response and if effective **<u>add</u>** **Levomepromazine** 10mg - 25mg SC via syringe pump over 24 hrs

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