### Last Days of Life ANTICIPATORY PRESCRIBING RECOMMENDATIONS for in-patient setting – ADULT

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>INDICATION(S)</th>
<th>STARTING PRN DOSE for PRN medication</th>
<th>STARTING DOSE for REGULAR medication</th>
<th>GUIDANCE NOTES</th>
</tr>
</thead>
</table>
| MORPHINE         | If not taking regular opioid (not on regular opioid for previous 7 days)   |                                      |                                      | • Morphine is recommended as first line subcut opioid for majority of patients in the last days of life  
• See guidance notes overleaf for prescribing recommendations for patients with pre-existing end stage kidney disease (eGFR <30)  
• Seek advice from local Specialist Palliative Care Team if conversion to alternative subcut opioid is required (see overleaf for contact details) |
|                  |                                   | 2.5 mg subcut 1 (one) hourly PRN   |                                      |                                                                                                                                                                                                         |
|                  |                                   | max PRN dose in 24 hours = 15mg  (equivalent to 6 PRN doses) |                                      |                                                                                                                                                                                                         |
|                  | If on regular opioid (regular opioid use during the previous seven days)   |                                      |                                      |                                                                                                                                                                                                         |
|                  |                                   |                                      |                                      |                                                                                                                                                                                                         |
| METOCLOPRAMIDE   | 1st line for NAUSEA and/or VOMITING | 10 mg subcut 8 hourly PRN           | 30 mg subcut in 24 hr syringe driver (plus PRN haloperidol) | • Seek advice from local specialist palliative care team if recommended antiemetic(s) is contra-indicated:  
Metoclopramide  
• Maximum subcut stat volume = 10mg (2mLs)  
• Caution with abdominal colic  
• Do not use if bowel obstruction suspected  
Haloperidol  
• Preferred antiemetic in renal impairment  
Metoclopramide & Haloperidol  
• Do not use in Parkinson’s Disease or Lewy Body Dementia  
• Watch for extrapyramidal side effects (repetitive and involuntary movements, abnormal restlessness and parkinsonism including tremor, rigidity and bradykinesia) |
|                  | 2nd line for NAUSEA and/or VOMITING | 1 mg subcut 4 hourly PRN            | 2 mg subcut in 24 hr syringe driver (plus PRN haloperidol) |                                                                                                                                                                                                         |
|                  | & 1st line for RESTLESSNESS and/or AGITATION | max PRN dose in 24 hours = 3mg  (equivalent to 3 PRN doses) |                                      |                                                                                                                                                                                                         |
|                  |                                   |                                      |                                      |                                                                                                                                                                                                         |
| BENZODIAZEPINE   | 2nd line for RESTLESSNESS and/or AGITATION | MIDAZOLAM* 2.5 mg subcut 2 hourly PRN | MIDAZOLAM* 10 mg subcut in 24 hr syringe driver (plus PRN midazolam) | • Midazolam  
• Is the benzodiazepine of choice for PRN dosing and regular dosing in a syringe driver  
**Clonazepam  
• Due to its long half-life, should be used when regular subcut benzodiazepine is required, but not in a syringe driver  
• Can be given by the SUBLING route as an alternative to SUBCUT route if parenteral access not available |
|                  | & 2nd line for BREATHELESSNESS with ANXIETY | max PRN dose in 24 hours = 15mg  (equivalent to 6 PRN doses) | CLONAZEPAM ** 0.5 mg subcut 12 hourly regularly (plus PRN midazolam) |                                                                                                                                                                                                         |
| GLYCOPPYRONIUM / GLYCOPPYROLATE | RESPIRATORY TRACT SECRETIONS | 0.2 mg subcut 4 hourly PRN           | 1.2 mg subcut in 24 hr syringe driver (plus PRN glycopyrolate) | • If respiratory tract secretions occur, prompt management is required  
• Anticholinergic medications may be ineffective or only partially effective  
• There is no conclusive evidence of superior efficacy between the different anticholinergics  
• Hyoscine hydrobromide HAS NOT BEEN RECOMMENDED as a first line agent as it is contraindicated in renal impairment and may potentiate delirium and sedation |
| HYOSCINE BUTYLBROMIDE (BUSCOPAN) |                                         | 20 mg subcut 4 hourly PRN           | 120 mg subcut in 24 hr syringe driver (plus PRN hyoscine butylbromide) |                                                                                                                                                                                                         |
|                  |                                         | max PRN dose in 24 hours = 120mg  (equivalent to 6 PRN doses) | 20 mg subcut in 4 hourly regularly (plus PRN hyoscine butylbromide) |                                                                                                                                                                                                         |
### ANTICIPATORY PRESCRIBING IN THE LAST DAYS OF LIFE: Prescribing Information

- All patients in the last days of life should have subcutaneous PRN medications prescribed pre-emptively to ensure that there is no delay in treating the common symptoms that may be experienced in the last days of life if they occur.

#### Recommendations for STARTING doses – Last Days of Life

- This guide includes the recommended starting dose for first-line medications to be pre-emptively prescribed for patients.
- Doses should be adjusted up or down to take into account the needs of the individual patient, including frailty and co-morbidities.
- Lower starting doses and/or PRN frequencies should be considered in the elderly or in patients with severe renal or hepatic impairment.
- Higher starting doses and/or PRN frequencies can be used if appropriate.

#### Recommendations for dose TITRATION

- Patients should be assessed regularly at least every 4 hours or more often if symptomatic.
- Response to non-pharmacological interventions and/or PRN medication doses must be assessed following intervention; further management should be instigated if symptom remains despite initial intervention.
- Symptom control should be reviewed at least daily, or more often if symptoms are uncontrolled, and background medication doses titrated upwards accordingly.
- If >3 PRN doses are required in previous 24 hours and/or symptoms persist, regular medications should be commenced or regular doses increased: see symptom management flowcharts for specific guidance on dose titration for each of the common symptoms.

For patients with pre-existing end stage kidney disease (eGFR <30):

- All of the starting medications recommended overleaf can be used in renal impairment.
- For specific prescribing guidelines: seek advice from local Specialist Palliative Care teams.

For patients dying in ICU:

- The existing intravenous route may be preferred over the subcutaneous route for patients dying in the ICU setting; all last days of life anticipatory medication recommendations in these guidelines can be given intravenously in the ICU setting.

#### Syringe Driver Drug Combinations and Compatibility

- Compatibility data supports the combination of life-anticipatory medications in a single syringe driver when diluted to maximum volume with 0.9% sodium chloride.
- When using alternative medications for symptom control advice regarding drug compatibility combinations should be sought from a medical officer or specialist nurse with appropriate knowledge and experience prior to administration.
- LHD policy and procedure must be followed when administering medications via a subcutaneous syringe driver.

If required, seek advice from local Specialist Palliative Care team with regard to any of the above.

See Palliative Care Therapeutic Guidelines (http://www.tg.org.au) for further advice on drug compatibilities.

### CONTACT DETAILS FOR LOCAL SPECIALIST PALLIATIVE CARE ADVICE

**Telephone:**

Available hours:

---

### SYMPTOM MANAGEMENT IN THE LAST DAYS OF LIFE: Supporting Information

#### PRINCIPLES OF SYMPTOM MANAGEMENT IN THE LAST DAYS OF LIFE

- Assess patient at least every four hours: to allow existing and emerging symptoms to be detected, assessed and treated effectively.
- If symptom(s) present:
  - 1. Instigate non-pharmacological measures in the first instance.
  - 2. If non-pharmacological measures ineffective, give PRN medication and review to assess effectiveness.
  - 3. If medication ineffective, reassess and instigate further intervention to manage symptom.
- Communicate: explain likely cause and management of symptom to patient and family.

#### PAIN – see symptom management flowchart for dosage guidance and conversion tables

- Non-pharmacological measures:
  - Ensure comfortable position; consider repositioning and/or alternative mattress.
  - Exclude other causes of pain and distress (e.g. urinary retention, anxiety, fear); manage appropriately if present.
  - If patients demonstrate opioid side effects or show clinical features of opioid toxicity:
    - Do NOT give an opioid antagonist (such as naloxone); this will precipitate uncontrolled pain and/or opioid withdrawal symptoms.

#### NAUSEA AND/OR VOMITING – see symptom management flowchart

- Non-pharmacological measures:
  - Regular and effective mouth care.
  - Sips of water and ice chips.
  - Provision of tissues and vomit bag within easy reach.
  - Nausea and/or vomiting can have multiple causes (i.e. gastrointestinal, central nervous, intracranial, vestibular and psychological).
  - See Palliative Care Therapeutic Guidelines (http://etg.hcn.com.au) for more detailed information and medication recommendations for specific causes.

#### RESTLESSNESS AND/OR AGITATION – see symptom management flowchart

- Agitated delirium and terminal restlessness is a COMMON symptom that occurs in the last days of life.
- Non-pharmacological measures should be considered before medications are introduced:
  - Exclude urinary retention; manage with catheterisation if present.
  - Exclude constipation; consider management with rectal laxatives if present.
  - Consider nicotine replacement therapy if the patient is a smoker.
  - Assess for emotional, psychological and existential distress; address appropriately if present.

#### RESPIRATORY TRACT SECRECTIONS – see symptom management flowchart

- Respiratory tract secretions are a normal part of dying process; they are not distressing to the patient, but often are for family and carers.
- Non-pharmacological measures:
  - Reassure family with explanation of the symptom, cause, & measures taken to relieve secretions.
  - Position patient semi-prone and on to alternate sides to encourage postural drainage; this may be sufficient.
  - Suction is NOT RECOMMENDED and can be distressing to the patient.

#### BREATHLESSNESS – see symptom management flowchart

- Non-pharmacological measures:
  - Reassure the patient and family with explanation of cause and management.
  - Position to maximise comfort and airway.
  - Use a fan and/or an open window.
  - Maintain a calm environment.

If required, seek advice from local Specialist Palliative Care team with regard to any of the above.

---

For further symptom management and prescribing advice, see CEC Last Days of Life Toolkit Symptom Management Flowcharts and Palliative Care Therapeutic Guidelines (http://www.tg.org.au)

**VERSION 2: APRIL 2017**

Released May 2017 © Clinical Excellence Commission SHPN (CEC170260).