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

MEDICATION	INDICATION(S)	STARTING PRN DOSE for PRN medication	STARTING DOSE for REGULAR medication			GUIDANCE NOTES
MORPHINE	PAIN & 1st line for BREATHLESSNESS	If not taking regular opioid (not on regular opioid for previous 7 days) 2.5 mg subcut 1 (one) hourly PRN max PRN dose in 24 hours = 15mg (equivalent to 6 PRN doses)	See pain and/or dyspnoea management flowchart for guidance on commencing regular subcutaneous morphine			• 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)
		If on regular opioid (regular opioid use during the previous seven days) See PAIN and/or BREATHLESSNESS management flowchart AND opioid chart on reverse of pain flowchart for guidance on conversion of oral/transdermal opioid to equivalent subcutaneous morphine				
METOCLOPRAMIDE	1st line for NAUSEA and/or VOMITING	10 mg subcut 8 hourly PRN max PRN dose in 24 hours = 30mg (equivalent to 3 PRN doses)	30 mg subcut in 24 hr syringe driver (plus PRN haloperidol)	OR	10 mg subcut 8 hourly regularly (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)
HALOPERIDOL	2nd line for NAUSEA and/or VOMITING & 1st line for RESTLESSNESS and/or AGITATION	1 mg subcut 4 hourly PRN max PRN dose in 24 hours = 3mg (equivalent to 3 PRN doses)	2 mg subcut in 24 hr syringe driver (plus PRN haloperidol)	OR	1 mg subcut 12 hourly regularly (plus PRN haloperidol)	
BENZODIAZEPINE	2nd line for RESTLESSNESS and/or AGITATION & 2nd line for BREATHLESSNESS with ANXIETY	MIDAZOLAM* 2.5 mg subcut 2 hourly PRN max PRN dose in 24 hours = 15mg (equivalent to 6 PRN doses)	MIDAZOLAM* 10 mg subcut in 24 hr syringe driver (plus PRN midazolam)	OR	CLONAZEPAM ** 0.5 mg subcut 12 hourly regularly (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
GLYCOPYRRONIUM / GLYCOPYRRONIUM OR **HYOSCINE BUTYLBROMIDE (BUSCOPAN)**	RESPIRATORY TRACT SECRETIONS	0.2 mg subcut 4 hourly PRN max PRN dose in 24 hours = 1.2mg (equivalent to 6 PRN doses)	1.2 mg subcut in 24 hr syringe driver (plus PRN glycopyrrolate)	OR	0.2 mg subcut 4 hourly regularly (plus PRN glycopyrrolate)	• If respiratory tract secretions occur, prompt management is required • Anticholingeric 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
		20 mg subcut 4 hourly PRN max PRN dose in 24 hours = 120mg (equivalent to 6 PRN doses)	120 mg subcut in 24 hr syringe driver (plus PRN hyoscine butylbromide)	OR	20 mg subcut 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 Compatibilities

- 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 prescribing and 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), as 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 SECRETIONS – 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 used 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

Last Days of Life

CLINICAL EXCELLENCE COMMISSION