Derbyshire Symptom Management Guidelines for last days of life

PRESCRIBING SUBCUTANEOUS OPIOID IN THE LAST DAYS OF LIFE

Is the patient already taking Morphine or other strong opioids?

YES

Convert from oral opioid to syringe driver
Calculate the 24 hour morphine dose; if not on morphine, refer to Palliative Care Dose Equivalence Guidance (at end of document) to convert to oral morphine equivalent. Divide the total morphine dose by 3, to get the equivalent dose of Diamorphine over 24 hours s/c via syringe driver – e.g. patient on 90mg Zomorph BD = 180mg oral Morphine over 24 hours = 60mg Diamorphine s/c over 24 hour infusion.

Breakthrough Analgesia
To calculate the breakthrough dose of Diamorphine divide the 24 hour dose of Diamorphine in the syringe driver by 6, e.g. if the patient is receiving 60mg Diamorphine s/c over 24 hours the breakthrough dose of Diamorphine is 10mg s/c prn.

Alternatively
Morphine oral liquid may be used if the patient is taking sips of fluid. To calculate the equivalent oral Morphine breakthrough dose, multiply the s/c breakthrough dose by 3, e.g. s/c Diamorphine 10mg for breakthrough up to hourly = 30mg oral Morphine for breakthrough.

Transdermal Fentanyl/Buprenorphine
If the patient is using transdermal opioid but now has uncontrolled pain, ***continue the current patch dose, do not increase***, and use appropriate PRN dose s/c Diamorphine according to patch dose. See Palliative Care Dose Equivalence Guidance. If considering a syringe driver in addition to a transdermal patch seek specialist advice.

NO

Anticipatory Medication

Diamorphine 2.5mg s/c prn hourly
AND IF ABLE TO TAKE SIPS
Morphine Sulphate 5mg orally prn hourly

If a patient requires more than 3 prn doses within 4 hours, consider whether pain is opioid responsive. A medical review of analgesia may be needed.

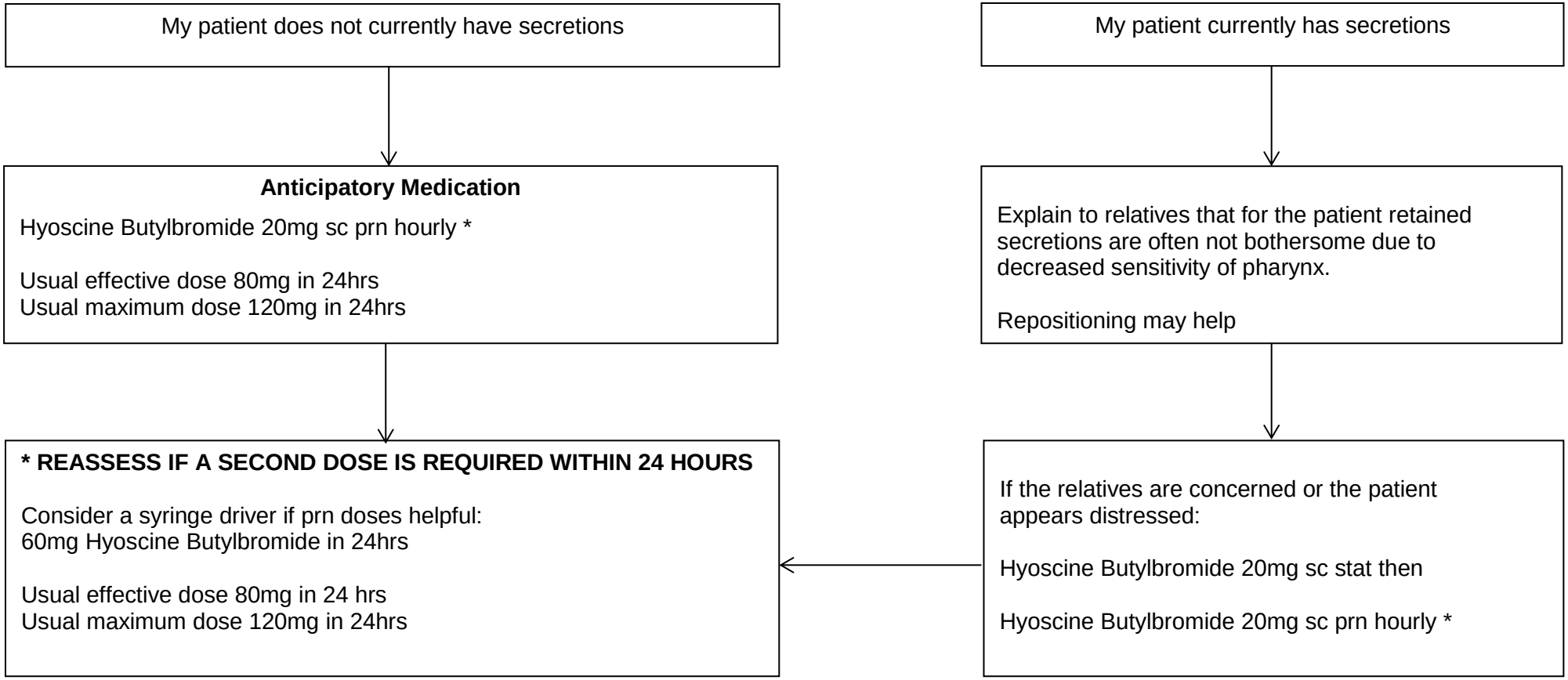
Reassess after 24 hours.
If persistent pain and pain opioid responsive consider a syringe driver

To calculate subsequent doses of Diamorphine over 24 hours:
Review the doses of prn analgesia given in the previous 24 hour period. If more than one dose has been required, other than to pre-empt during care, (e.g. before a dressing etc.) then consider a 30% to 50% increase in the daily subcutaneous dose. If this is not controlling the pain or doses need escalating on a daily basis, seek specialist advice.

If renal function is impaired, consider reducing the dose of Diamorphine and increasing the prn dosing interval.
If oxycodone is being used in place of Diamorphine refer to Dose Equivalence Guidance Chart.

IF SYMPTOMS PERSIST – SEEK SPECIALIST ADVICE FROM YOUR LOCAL PALLIATIVE CARE TEAM

RETAINED SECRETIONS IN THE LAST DAYS OF LIFE



IF SYMPTOMS PERSIST – SEEK SPECIALIST ADVICE FROM YOUR PALLIATIVE CARE TEAM

TERMINAL RESTLESSNESS AND AGITATION

My patient is comfortable at present

Anticipatory Medication

Haloperidol 1.5-3mg sc prn up to hourly (usual maximum 10mg/24h)

Midazolam 2.5mg sc prn up to hourly - if 3 doses needed within 4 hours then seek medical advice

My patient has symptoms of restlessness and agitation

Consider reversible causes for example

Pain
Retention of urine or faeces
Hypoxia

Delirium

Haloperidol 1.5 - 3mg po/sc stat then

Haloperidol 1.5-3mg po/sc prn hourly (usual maximum 10mg/24h)

Anxiety

Midazolam 2.5mg sc stat then

Midazolam 2.5mg sc prn hourly - if 3 doses needed within 4 hours then seek medical advice

More able patients may use sublingual lorazepam 0.5mg hourly

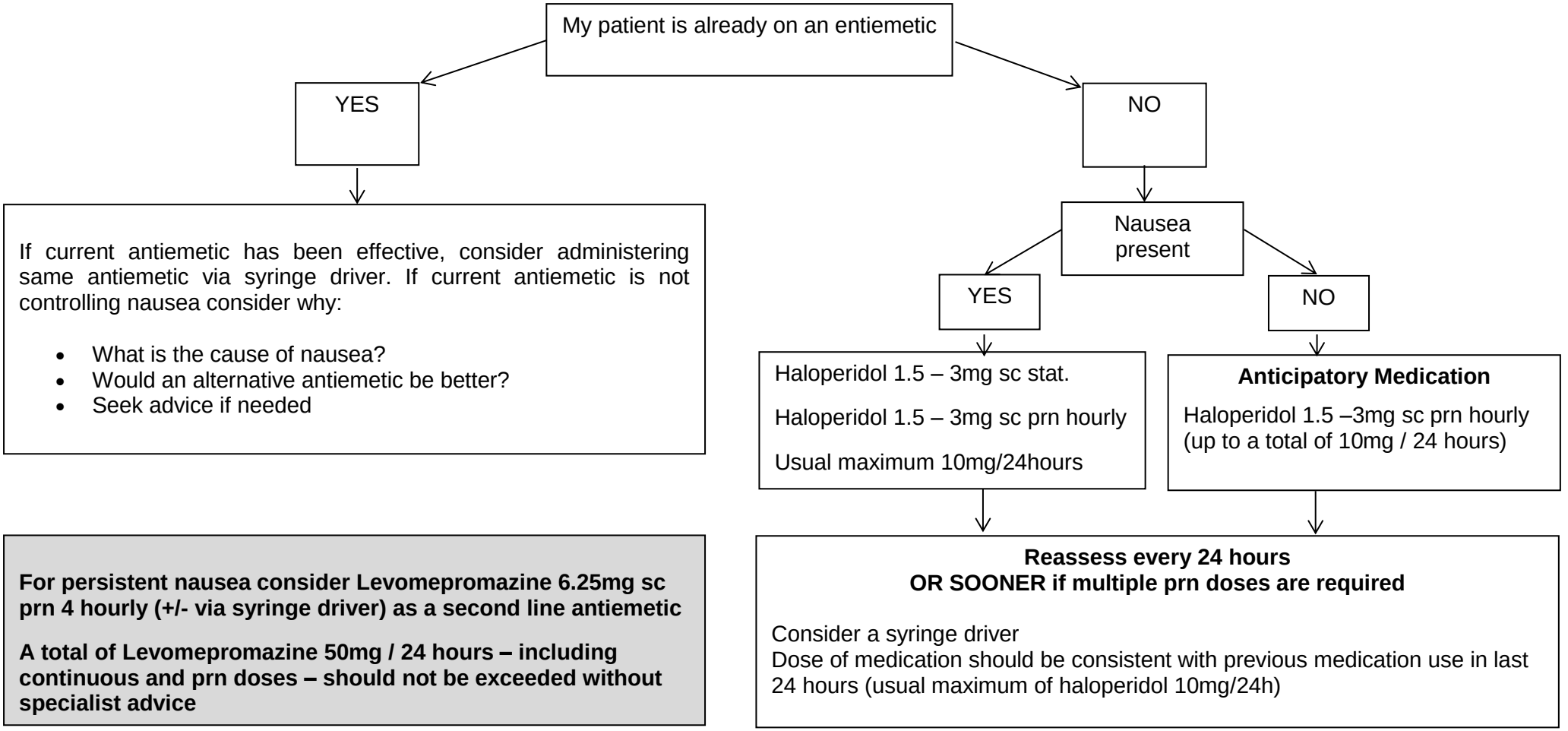
Reassess every 24 hours OR SOONER if multiple prn doses are required

Consider a syringe driver if prn doses have been helpful
Dose of medication should be consistent with previous medication use in last 24 hours (usual maximum of haloperidol 10mg/24h; midazolam dose should not be increased by more than 10mg/24h each day without specialist advice). In some cases a combination of an antipsychotic and midazolam may be required.

A second line, more sedating antipsychotic is Levomepromazine 6.25 – 12.5mg sc 4 hourly

IF SYMPTOMS PERSIST – SEEK SPECIALIST ADVICE FROM YOUR PALLIATIVE CARE TEAM

NAUSEA IN THE LAST DAYS OF LIFE



IF SYMPTOMS PERSIST – SEEK SPECIALIST ADVICE FROM YOUR PALLIATIVE CARE TEAM

TERMINAL BREATHLESSNESS

My patient is not currently breathless

My patient is currently breathless and distressed

My patient is currently prescribed regular oral opioid or fentanyl patch

NO

Give anticipatory medication as soon as possible

YES

Anticipatory Medication

Diamorphine 2.5mg (or if on regular opioid dose as per Palliative Care Dose Equivalence Guidance) sc prn hourly for tachypnoea – if 3 doses needed within 4 hours then seek medical advice
AND
Midazolam 2.5-5mg sc prn hourly for distress associated with dyspnoea - for a maximum of 3 doses within 24 hrs then seek medical advice

If patient is able to take sips of water you may also consider:
Morphine Sulphate 5mg (adjust dose if on regular opioid) orally prn hourly
AND
Lorazepam 0.5mg hourly sublingual

Convert total daily dose of opioid to Diamorphine sc via syringe driver following Prescribing Subcutaneous Opioid guidance **BUT** consider increasing the Diamorphine dose equivalent by 30-50% to ease dyspnoea

If using a fentanyl patch, do not remove patch
ADD syringe driver with Diamorphine at 30-50% 24 hour Diamorphine dose equivalent.
If in doubt seek specialist advice.

Prescribe anticipatory opioid prn hourly based on 1/6th of total daily dose of opioid (don't forget to include fentanyl patch in this calculation if fentanyl in use)

Midazolam 2.5-5mg sc prn hourly for distress associated with dyspnoea - for a maximum of 3 doses then seek medical advice.

If patient has already used prn midazolam with effect consider combination of diamorphine/midazolam in syringe driver. Midazolam dose based on prn use over 24hrs

Reassess every 24 hours OR SOONER if multiple prn doses are required
Consider starting a syringe driver

AIM for the patient's breathing to be calm and effortless

IF SYMPTOMS PERSIST – SEEK SPECIALIST ADVICE FROM YOUR PALLIATIVE CARE TEAM

GUIDELINES FOR CARE OF DIABETIC PATIENTS IN THE LAST DAYS OF LIFE

Practical points:-

1. Ensure any clinical deterioration is not due to reversible hyperglycaemia or hypoglycaemia before making further management decisions particularly if the deterioration is unexpected.

2. Regularly review the patient and their diabetes management plan as their condition changes in the **last year** of life.

3. If your patient is in the **last WEEKS** of life, refer to other guidance https://www.diabetes.org.uk/end-of-life-care
   Aim of treatment is to avoid symptoms of hyperglycaemia and hypoglycaemia, tight control is not necessary

4. If a patient has been recognised to be dying and believed to be in the **last DAYS** of life, insulin and oral agents can usually be stopped.

    a. Blood or urine glucose monitoring should be kept to the minimum necessary and stopped if causing distress to the patient.

    b. If death imminent i.e. expected in less than 24 hours, it may be appropriate to discontinue all monitoring and insulin, usually after discussion with the family.

5. **SEEK SPECIALIST ADVICE IF UNCERTAIN**

- In usual office hours, your local Palliative Care Team
- Community Diabetes Specialist Nurse
  Monday to Friday, in office hours, usually 9am to 5pm.Tel 01629 817878 Mobile 07884415168 or 07900584162
- Out of Hours Ashgate Hospice Tel: 01246 568801
- Out of Hours Nightingale Macmillan Unit Tel: 01332 786040

PALLIATIVE CARE DOSE EQUIVALENCE GUIDANCE (1 of 2)

These dose equivalents are approximate and may need to be adjusted according to response

Total oral Morphine 24 hour	*Zomorph or MST twice daily po*	*Morphine hourly po prn dose*	*Diamorphine hourly sc prn dose*	*Diamorphine sc in 24 hours*	*Oxycodone MR(Oxycontin) twice daily po*	*Oxycodone immediate release (Oxynorm) hourly po*	*Oxycodone hourly sc prn dose*	*Oxycodone s/c in 24 hours*	*Fentanyl patch 72 hourly***	*Buprenorphine patch per hour*
20mg	10mg	2.5mg	1.25mg	7.5mg	5mg	1mg	*	*	*	5mcg (Bu Trans)
30mg	15mg	5mg	2.5mg	10mg	5-10mg	2.5mg	*	7.5mg	12mcg	10mcg (Bu Trans)
40mg	20mg	7.5mg	2.5mg	15mg	10mg	2.5mg	*	10mg	12mcg	15mcg (Bu Trans)
60 mg	30 mg	10mg	5 mg	20 mg	15 mg	5 mg	2.5mg	15 mg	25mcg	20mcg (Bu Trans)
90mg	40mg	15mg	5mg	30mg	20mg	7.5mg	4 mg	20mg	37mcg	Suggest use Fentanyl Patch
120 mg	60 mg	20 mg	7.5mg	40 mg	30 mg	10 mg	5 mg	30mg	50mcg	“
180 mg	90 mg	30 mg	10 mg	60 mg	45 mg	15 mg	7.5 mg	45 mg	75 mcg	“
240 mg	120 mg	40 mg	15 mg	80 mg	60 mg	20 mg	10 mg	60 mg	100mcg	“
300 mg	150 mg	50 mg	20 mg	100 mg	75 mg	25mg	12.5 mg	75 mg	100 mcg	“
360 mg	180 mg	60 mg	20 mg	120 mg	90 mg	30 mg	15 mg	90mg	100 mcg	“
400 mg	200 mg	70 mg	20 mg	140 mg	100 mg	35 mg	17.5 mg	100mg	125 mcg	“
480mg	240 mg	80 mg	30 mg	160 mg	120 mg	40 mg	20 mg	120 mg	125 mcg	“
540 mg	260 mg	90 mg	30 mg	180 mg	130 mg	45 mg	22.5 mg	130mg	150 mcg	“

. ***** Dose too small to be used practically. Consider alternative medication. ****** Ref PCF 5 p666 Table 1. Doses based on conversion ratio of 150:1

PALLIATIVE CARE DOSE EQUIVALENCE GUIDANCE 2 of 2

Breakthrough analgesia
Dose of Opioid should be **1/6th** of the total daily dose (dose over 24 hours). This is the same as the four hourly dose

Conversion guidance for weak Opioids

Tramadol
Tramadol po100mg = Morphine po 10mg
Tramadol po 100mg four times daily (400mg/24 hours) = Morphine po 40mg/24 hours.

Codeine
Codeine po 30mg = Morphine po 3 mg
Codeine po 60mg four times daily (240mg/24 hours) = Morphine po 24mg/24 hours

Opioids in renal impairment

Morphine, diamorphine, codeine, tramadol and oxycodone are metabolised to active metabolites which are excreted by the kidneys. In renal failure, metabolites can accumulate and have the potential to cause opioid toxicity but there is considerable interpersonal variation. Symptoms of opioid toxicity can be reduced in some patients by switching to an alternative opioid such as oxycodone or fentanyl, however there is a risk of losing the analgesic benefit of one opioid during rotation to another and this may be detrimental to care in the last days of life.

In the last days of life if renal function is impaired, consider:

1. Reducing the dose of diamorphine or morphine and increasing the prn dosing interval.
2. Managing toxicity using haloperidol for nausea and hallucinations and midazolam for myoclonus if present