NHS East London NHS Foundation Trust

Bedfordshire Palliative Care

NHS Bedfordshire

Palliative Care

Medicines Guidance

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This folder has been produced to support professionals providing palliative care in any setting. Its aim is to make 'best practice' in palliative care more achievable across Bedfordshire, especially during the last few days of life.

For patients and their carers this means smoother symptom control, better support in a crisis, and avoidance of admission if that is their choice.

Bedfordshire Specialist Palliative Care out of hours advice may be obtained from:

- NHS Bedfordshire Palliative Care Hub (PCH)
  - Tel: 01767 641349 seven days a week
  - Consultant support is available 24 hours a day

Communications: Please update Out of Hours Doctors' Service and also, where appropriate, District Nursing Service:

Principles of anticipatory prescribing

- This guidance provides general recommendations for the pharmacological management of common symptoms in the last days of life.
- Reversible causes of symptoms should be treated where appropriate.
- Non- pharmacological methods should also be considered e.g. re-positioning to manage respiratory secretions.
- Involve the dying person and those important to them in making decisions about symptom control in the last days of life where possible
- Use an individualised approach to prescribing anticipatory medicines for people, assessing what medicines the person might need to manage symptoms likely to occur during their last days of life.
- When deciding which anticipatory medicines to offer, take into account:
  - The likelihood of specific symptoms occurring
  - The likely cause of symptoms
  - The benefits and harms of prescribing or administering medicines
  - The benefits and harms of not prescribing or administering medicines
  - The possible risk of the person suddenly deteriorating (for example, catastrophic haemorrhage or seizures) for which urgent symptom control may be needed
  - The place of care and the time it would take to obtain medicines
- Ensure that suitable anticipatory medicines are prescribed as early as possible.
- Specify the indications for use and the dosage of any medicines prescribed, start with the lowest effective dose.
- Specify an appropriate route for administration, if the person is unable to take or tolerate oral medication, give subcutaneous injections.
- Consider giving continuous medication via a syringe pump if more than 2 or 3 doses of 'as required' medicines have been given within 24 hours.
  Review symptoms before and after anticipatory medicines are administered to inform appropriate titration of medicine. Monitor for benefits and any side effects at least daily and adjust the individualised care plan and prescription as necessary.
- Please consider background doses whilst prescribing breakthrough medications taking into account maximum dosing over 24 hours.

BEDFORDSHIRE END OF LIFE CARE ANTICIPATORY PRESCRIBING GUIDANCE

Indication	Drug	PRN Subcutaneous (s/c) dose	Syringe Pump dose (CSCI*/24 Hours)	Think Box
Pain If opioid naïve	Morphine Sulphate **OR** Diamorphine	2.5mg – 5mg s/c 2-4 hourly	10-20 mg/24 hours	The initial dose for morphine and diamorphine in opioid naïve patients are equivalent. Treat reversible cause e.g. urinary retention. Consider co-analgesics e.g. Paracetamol. Consider reducing dose and frequency of morphine or using an alternative opioid e.g. renal failure or frailty If the patient is already on an alternative opioid or analgesic patch seek specialist advice or review opioid conversion guidance. Consider background analgesia i.e. Fentanyl Patch. A suitable breakthrough dose is 1/6th – 1/10th of the total 24 hour opioid dose
Pain If already on regular oral morphine	Morphine Sulphate	Divide the total oral morphine dose by 12 e.g. 30mg MST bd = 60mg divide by 12 = 5mg s/c 2-4 hourly	Half of the total oral Morphine dose. e.g. 30mg MST bd = 30mg Morphine/24 hours	
	Diamorphine	Divide the total oral morphine dose by 18 e.g. 30mg MST bd = 60mg divide by 18 = 3mg s/c 2-4hourly	Divide the total oral Morphine dose by 3 e.g. 30mg MST bd = 20mg Diamorphine/24 hours	
Breathlessness	Morphine Sulphate	2.5mg s/c 2-4 hourly If opioid naïve	5-10 mg/24 hours If opioid naïve	Only offer oxygen for hypoxaemia. May need both an opioid and benzodiazepine. Benzodiazapine will be more effective if anxiety is contributing to worsening of breathlessness. For patients already on regular oral opioids use equivalent prn and CSCI dose. The Genus brand of lorazepam is preferred as it dissolves faster when used sublingually
	Midazolam	2.5mg s/c 2-4 hourly	10-20mg/24 hours	
	Lorazepam	500 micrograms – 1mg **sublingual** 6 hourly (tablets used off label sublingually)	N/A	
Nausea and Vomiting	1st line Cyclizine	50 mg s/c 8 hourly	100mg-150mg/24 hours	Caution with Cyclizine in heart failure. Caution with Haloperidol in Parkinson's. If already on an effective anti-emetic then continue this For bowel obstruction see specialist advice.
	2nd line Haloperidol	500 micrograms-2.5mg s/c 2-4hrly	3-5mg/24 hours	
Anxiety, delirium and agitation	Midazolam	2.5mg-5mg s/c 2 hourly	10-20mg/24 hours	Treat reversible cause e.g. pain, urinary retention. Consider level of sedation required. Consider benzodiazepines for anxiety/agitation and antipsychotics for delirium/agitation. Caution with Haloperidol in Parkinson's
	Lorazepam	500 micrograms – 1mg **sublingual** 6 hourly (tablets used off label sublingually)	N/A	
	Haloperidol	500 micrograms -3mg s/c 2 hourly	1.5-10mg/24 hours	
Noisy respiratory secretions	Glycopyrronium Bromide	200 micrograms- 400 micrograms s/c 6 hourly	600 micrograms-1.2mg/24 hours	Reposition patient. Reassure relatives and only use medications if secretions are causing distress. Consider switching/stopping if no benefit after 24 hours
Supplementary prescribing (for patients with specific risk factors only)				
Seizures	Midazolam	10mg s/c stat	20-30mg/24 hours	Replace oral anticonvulsive drugs with Midazolam CSCI if no longer able to swallow. If taking oral steroids for cerebral disease seek specialist advice on converting to CSCI. Midazolam injection may also be administered via the buccal route at a stat dose of 10mg in status epilepticus. This constitutes off label use of the injection.
Severe haemorrhage	Midazolam	10mg s/c stat	NA	Manages distress in acute, severe bleeding. For on-going bleeding, treat any distress or pain as above.

*** CSCI = continuous subcutaneous infusion**

BEDFORDSHIRE END OF LIFE CARE
ANTICIPATORY PRESCRIBING GUIDANCE

Medication	Supply	Strength
Morphine Sulphate opioid naïve*	FIVE to TEN	10mg/1ml ampoules
Diamorphine	FIVE to TEN	10mg/1ml powder for reconstitution
Midazolam	TEN	10mg/2ml powder for reconstitution
Lorazepam (Genus brand)	TEN	1mg sublingual tablets
Cyclizine	TEN	50mg/1ml ampoules
Haloperidol	TEN	5mg/1ml ampoules
Glycopyrronium	TEN	200microgram/1ml ampoules
Water for injection	TWENTY	10ml ampoules

Quantities prescribed are at the clinical discretion of the prescriber as stated quantities may not be suitable for all patients. * Seek advice on appropriate supply for patients already taking regular opioids or alternative opioids.

Specialist Palliative Care Advice

Seek advice if there is uncertainty about the cause of symptoms, if symptoms do not improve with treatment, higher dose ranges are needed or there are undesirable side effects

Area	Service	Daytime	24/7 Advice Line
Bedfordshire	St Johns Hospice	01767 642140	01767 641349 (PCH)
	Community Specialist Palliative Care Nurses 9am-5pm	Mobile Phone of Specialist Nurse aligned to GP Practice	01767 641349 (PCH)
	Keech Hospice	01582492339	0808 1807788
Milton Keynes	Willen Hospice	01908 306636	01908 306962

GUIDANCE DOSES FOR BuTRANS® (BUPRENORPHINE) MATRIX PATCH (changed every 7 – days)

BuTRANS®	5 microgram/hour patch	10 microgram/hour patch	20 microgram/hour patch
TRAMADOL oral	≤ 50mg/day	50-100mg/day	100-150mg/day
CODEINE oral	30-60mg/day	60-120mg/day	120-180mg/day
DIHYDROCODEINE oral	60mg/day	60-120mg/day	120-180mg/day

List of participating pharmacists stocking end of life medications

http://www.gpref.bedfordshire.nhs.uk/referrals/speciality/palliative-care/end-of-life-medicines-service.aspx

OPIOID CONVERSION GUIDELINE FOR MORPHINE AND OTHER STRONG OPIOIDS

ORAL		PARENTERAL		PARENTERAL		ORAL		PARENTERAL		TRANSDERMAL		PARENTERAL
MORPHINE		MORPHINE		DIAMORPHINE		OXYCODONE[1]		OXYCODONE[2]		FENTANYL	BUPRENORPHINE	ALFENTANIL
Modified release 12 – hourly dose	Immediate release 4 – hourly/ breakthrough dose	24 hour continuous s/c infusion	4 hourly/ breakthrough s/c injection	24 hour continuous s/c infusion	4 hourly/ breakthrough s/c injection	Modified release 12 – hourly dose	Immediate release 4 – hourly/ breakthrough dose	24 hour continuous s/c infusion	4 hourly/ breakthrough s/c injection	Controlled release 72 - hourly	TRANSTEC[4] Controlled Release 96 – hourly dose	24 hour continuous s/c infusion
15mg	5mg	15mg	2.5mg	10mg	2mg	5 – 10mg	2.5mg	7.5mg	1.25mg	12mcg/hr	35mcg/hr	1mg
30mg	10mg	30mg	5mg	20mg	3mg	15mg	5mg	12.5mg	2.5mg	25mcg/hr	35mcg/hr	2mg
45mg	15mg	45mg	7.5mg	30mg	5mg	20mg	7.5mg	22.5mg	3.75mg	50mcg/hr	35mcg/hr	3mg
60mg	20mg	60mg	10mg	40mg	7mg	30mg	10mg	30mg	5mg	50mcg/hr	52.5mcg/hr	4mg
90mg	30mg	90mg	15mg	60mg	10mg	45mg	15mg	45mg	7.5mg	75mcg/hr	-	5mg
120mg	40mg	120mg	20mg	80mg	13mg	60mg	20mg	60mg	10mg	100mcg/hr	-	8mg
For doses above 300mg Morphine equivalent , take advice from a Specialist												
150mg	50mg	150mg	25mg	100mg	17mg	75mg	25mg	75mg	12.5mg	125mcg/hr	-	10mg
180mg	60mg	180mg	30mg	120mg	20mg	90mg	30mg	90mg	15mg	150 mcg/hr	-	12mg
240mg	80mg	240mg	40mg	160mg	27mg	120mg	40mg	120mg	20mg	200mcg/hr	-	16mg
360mg	120mg	360mg	60mg	240mg	40mg	180mg	60mg	180mg	30mg	300mcg/hr	-	24mg
450mg	150mg	450mg	75mg	300mg	50mg	220mg	75mg	225mg	37.5mg	Seek alternative	-	30mg
540mg	180mg	540mg	90mg	360mg	60mg	270mg	90mg	270mg	45mg	Seek alternative	-	36mg
720mg	240mg	720mg	120mg	480mg	80mg	360mg	120mg	360mg	60mg	Seek alternative	-	48mg

1. Potency ratio of oral oxycodone:oral morphine ranges from 1.5-2, i.e. 5mg morphine ≈ 2.5-3.5mg oxycodone. Ratio of 2 used for calculations, i.e. estimation at lower end of range.
2. Using NAPP guidelines for 2:1 conversion or oral to sc oxycodone. Results in 4:1 ratio oral morphine:sc oxycodone ratio when taking into account reference A above, i.e. low end estimation. Note that Napp guidelines recommend use of same oxycodone dose when converting to/from parenteral diamorphine.
3. Using Janssen guidelines (manufacturer of Durogesic DTrans) for patients on stable and well tolerated opioid therapy: conversion ratio of oral morphine to transdermal fentanyl is approximately equal to 100:1.
4. SPC for Transtec: maximum of 2 patches to be applied at any one time (available in 35, 52.5, 70mcg/hour patch strengths). Patches to be applied for maximum of 96 hours – for convenience, can use regimen whereby patches changed on same two days each week. It is generally advisable to titrate the dose individually, starting with the lowest TD patch strength (35microgram/h). Clinical experience has shown that patients who were previously treated with higher doses of a strong opioid (approximately 120mg oral morphine per day) may start therapy with the next higher TD patch strength (i.e. 52.5microgram/h). Please note the buprenorphine patch conversion is specific for the Transtec 96hrs.