

Symptom Control in the Dying Adult Patient

Key Points

This guideline summarises the agreed principles of care and management of the following symptoms at the end of life:

- Pain
- Agitation (delirium and anxiety)
- Respiratory tract secretions
- Nausea and vomiting
- Breathlessness

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Print copies must be destroyed after use.

Abbreviations

eGFR	Estimated glomerular filtration rate
PRN	Pro Re Nata (as required)
SC	Subcutaneous

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Symptom Control Guidelines

Background

- These guidelines should be followed in conjunction with FHFT [Care of the Dying Adult Patient guidelines](#) including Guiding Principles (based on 5 National Priorities for End of Life Care).¹
- Although symptom control in the last days of life is generally a continuation of the established management plan, well managed symptoms can recur or new symptoms develop.²
- Anticipatory prescribing for symptoms of **pain, respiratory tract secretions, nausea and vomiting, agitation, and dyspnoea** is an essential part of best care for the dying patient.³⁻⁷
- Medications should be started at appropriate starting doses (as shown in the algorithms below) and up-titrated as necessary.^{4,5}
 - Medications should be given in response to symptoms and not simply because the patient is dying.¹
- Patients on established oral or parenteral symptom control medications should have these continued in an appropriate formulation, which is likely to be subcutaneously.
- This guideline is intended to outline best practice in prescribing for the dying patient. It is based on the clinical experience of the specialist palliative care team, supported by clinical evidence where available. Clinical management should always be tailored to the individual needs of the patient and supported by the specialist palliative care team, where required.

For advice on more complex symptom control, including prescriptions in renal failure (particularly if eGFR is less than 30 ml/min) and liver failure, please contact the Palliative Care Team on extn 136755/bleep 5799 at FPH or extn 154879/CNS mobile: 07766367058 at WPH. Out of hours, please contact the duty Palliative Medicine Consultant for the relevant hospital via switchboard.

Clinical guidelines

Pain

- In addition to the known pain symptoms, new pain may develop in the dying patient.
- Careful clinical assessment should be undertaken to identify any treatable causes: for example, full bladder, constipation, or a developing pressure sore.
 - In a semi-conscious patient who cries out during care or turning, communication and explanation should be provided to prevent an alarm response to an unexpected disturbance.²
- If additional analgesic medication is required, opioids, usually **morphine sulfate**, are the mainstay of pain relief at the end of life.^{4–6}
 - An approach to safe prescribing of morphine sulfate at the end of life is outlined in the pain algorithm of this document.
- Morphine sulfate can accumulate in renal and hepatic failure, resulting in distressing side effects including drowsiness, myoclonic jerks and visual hallucinations.⁸
 - Alternative opioids such as oxycodone and alfentanil may be better tolerated in renal failure.

Agitation (anxiety and delirium)

- Patients may display fluctuations in consciousness at the end of life, which can be complicated by delirium.⁹
 - Increasing restlessness, confusion or emotional distress is often described as terminal agitation, and can result from physical symptoms and psychological or spiritual suffering.^{4,9}
- Clinical assessment should be undertaken to identify reversible causes of delirium including infection, metabolic disturbances (e.g. hypercalcaemia), constipation, urinary retention, unmanaged physical symptoms and drug toxicity.^{9,10}
- Non pharmacological management should be considered. This may involve psychological and spiritual support, or measures such as improving environment and orientation, and involving familiar staff and family members.^{9,10}
- Pharmacological management of delirium should involve an antipsychotic, for example **haloperidol or levomepromazine**.^{2,5,6,10}
 - Terminal agitation may require a combination of an antipsychotic for delirium AND a benzodiazepine (**midazolam**) for anxiety.^{2,6,9}
 - The use of a benzodiazepine alone may exacerbate or precipitate delirium.^{2,9–11}
 - A pharmacological approach to management of agitation and distress is outlined in the agitation algorithm below.

- Anti-psychotic medications can worsen Parkinsonism and can reduce seizure threshold. Midazolam should be used for patients with Parkinson's disease or at increased risk of seizures.^{2,9}
- Patients or families may raise concerns about the use of sedative medication at the end of life.
 - Evidence suggests that use of sedatives in the last days and hours of life is effective in relieving refractory symptoms and, when used proportionately to symptoms, it does not hasten an already expected death.^{12,13}
 - There should be careful clinical evaluation undertaken to identify the indications, and review the ongoing need for, sedatives in a dying patient, with clear documentation in the notes.
 - The decision to use sedatives should be discussed with the patient where possible, and with the family or carers.

Respiratory secretions

- Patients who are close to death may develop noisy, moist breathing ("death rattle").
 - The cause is often multifactorial and can include pooling of saliva, respiratory tract infection, pulmonary oedema and gastric reflux.²
- The symptom is often more distressing for the relatives than for the patient, and reassurance should be provided to explain this.^{2,4,14,15}
- Non pharmacological measures to reduce secretions include re-positioning the patient in a semi-prone position to encourage postural drainage, or upright positioning for pulmonary oedema or reflux.
 - Oropharyngeal suction may be considered, but can be distressing and should generally be reserved for unconscious patients.²
- If symptoms do not settle with basic care, please refer to the respiratory tract secretions algorithm for guidance in prescribing antisecretory medication (**hyoscine butylbromide [buscopan]**).^{2,6,15}

Nausea and vomiting

- If the patient is on an established antiemetic regimen, this should be continued in the terminal phase of illness with conversion to delivery via the subcutaneous route where possible.
- New symptoms of nausea and vomiting should be assessed clinically to determine the cause, if possible, and to tailor the choice of antiemetic.
 - Constipation and bowel obstruction should be considered.⁵
 - Haloperidol and levomepromazine are effective for biochemical causes of nausea and vomiting, including renal failure.²
 - Cyclizine may be preferred for vomiting secondary to raised intracranial pressure.²
- In the dying patient with multifactorial origin of nausea and/or vomiting, **haloperidol**^{5,6} or **levomepromazine**^{2,6} could be considered, as outlined in the accompanying nausea and vomiting algorithm shown below.

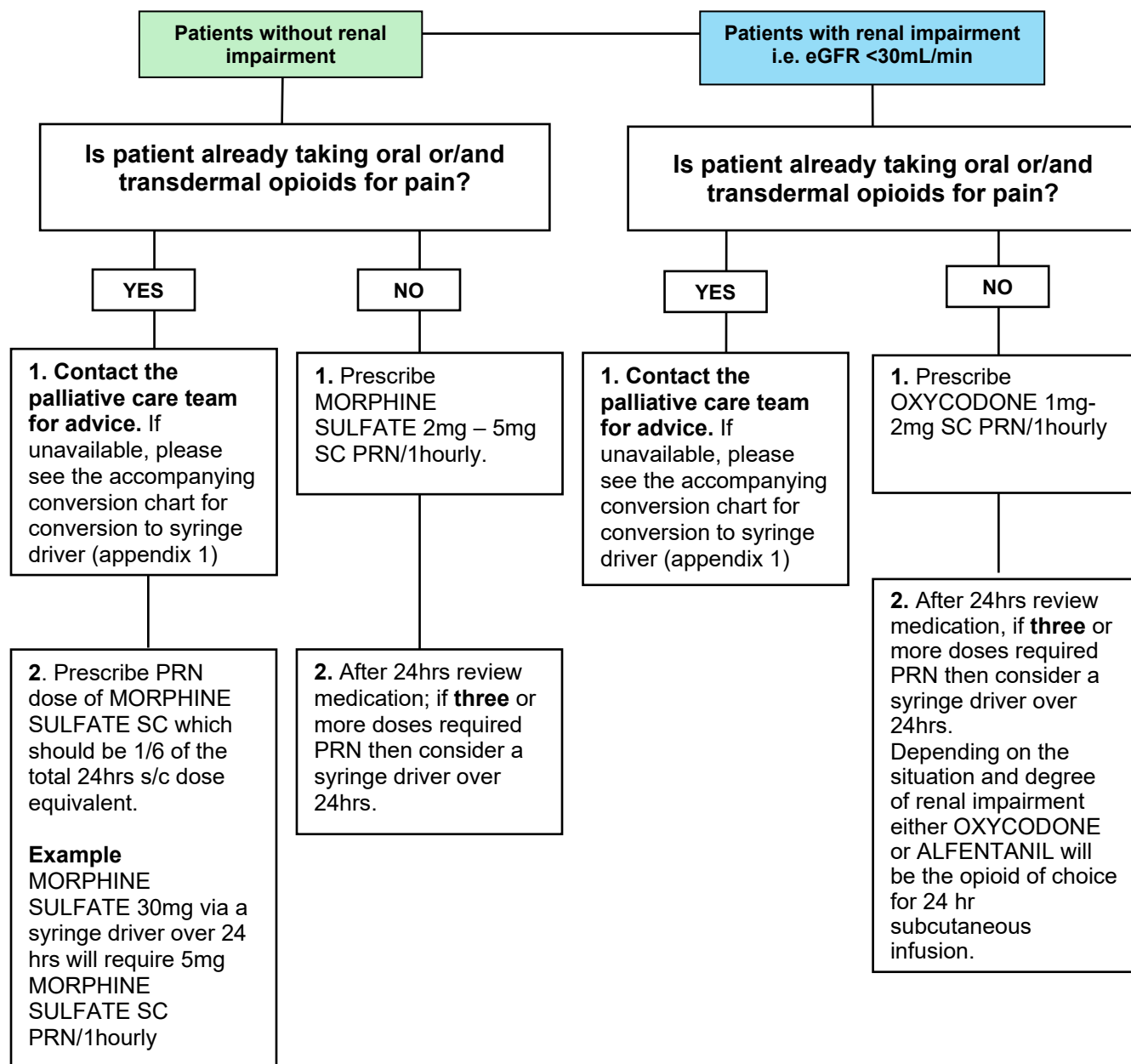
Breathlessness

- Breathlessness is a distressing symptom often reported at the end of life.^{4,16}
- Opioids have been shown to be beneficial in the management of symptomatic dyspnoea.^{5,6,17,18,19}
 - There is no evidence of a deleterious effect on arterial blood gases or oxygen saturations.^{17,18}
 - An approach to the use of **morphine sulfate** for management of dyspnoea is outlined in the breathlessness algorithm below.
- Morphine sulfate can accumulate in renal and renal failure, resulting in distressing side effects including drowsiness, myoclonic jerks and visual hallucinations.⁸
 - Alternative opioids such as oxycodone and alfentanil may be better tolerated in renal failure.

General note on prescribing

If more than one drug is to be administered via a syringe driver in combination and the prescriber is not familiar with the combination and a suitable diluent, please contact your available senior colleague or your Palliative Care Team for advice (or the duty Palliative Medicine Consultant for the relevant hospital, if out of hours).

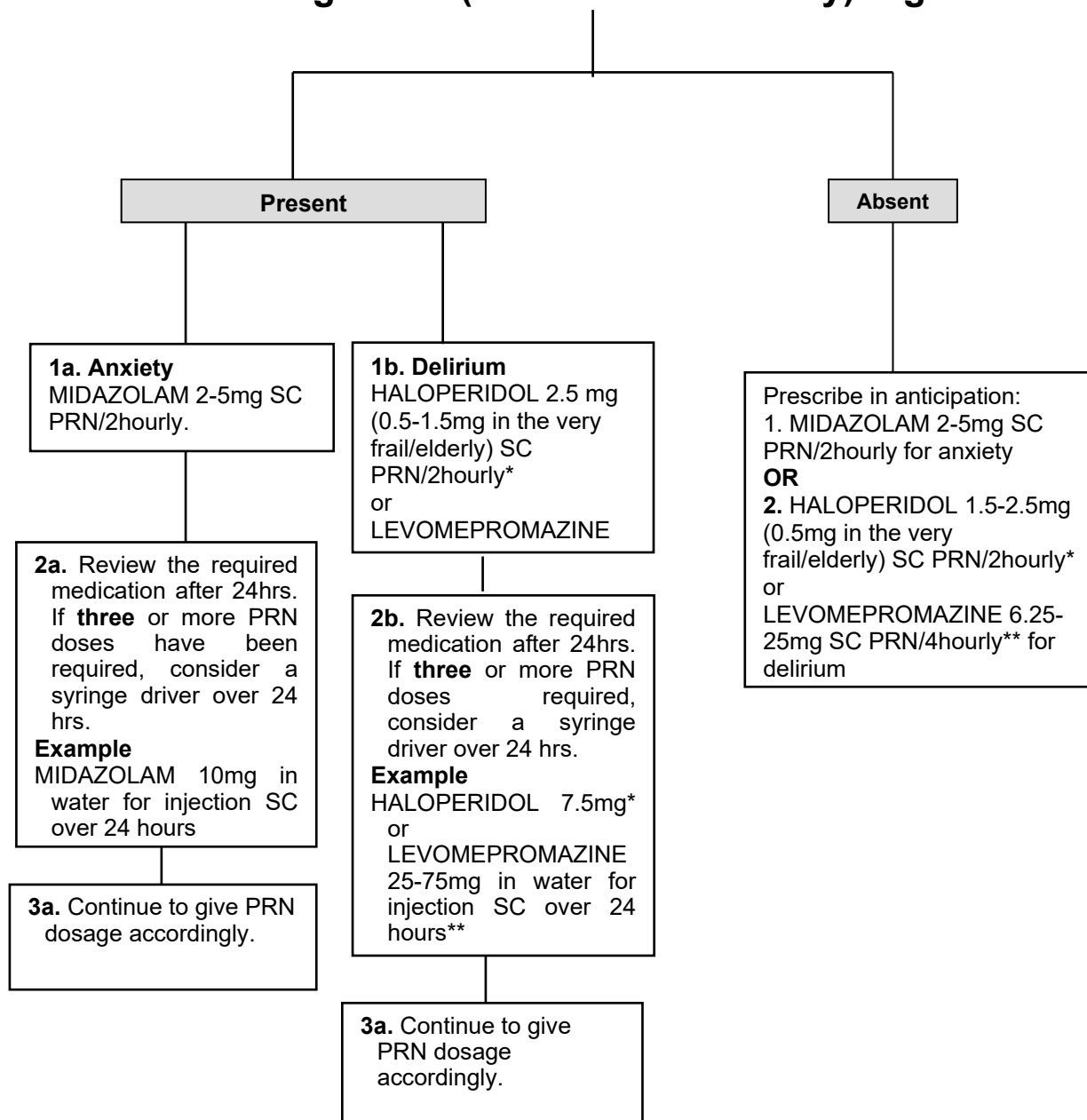
Pain Algorithm



SUPPORTIVE INFORMATION

- To convert from morphine to other strong opioids, please see appendix 1 and consider discussion with the Palliative Care Team, particularly if high doses are used, as dose reduction may be required.
- To convert from fentanyl and buprenorphine patches (not usually required in the last days of life) please contact Palliative Care Team/Pharmacy for further advice and support as needed.

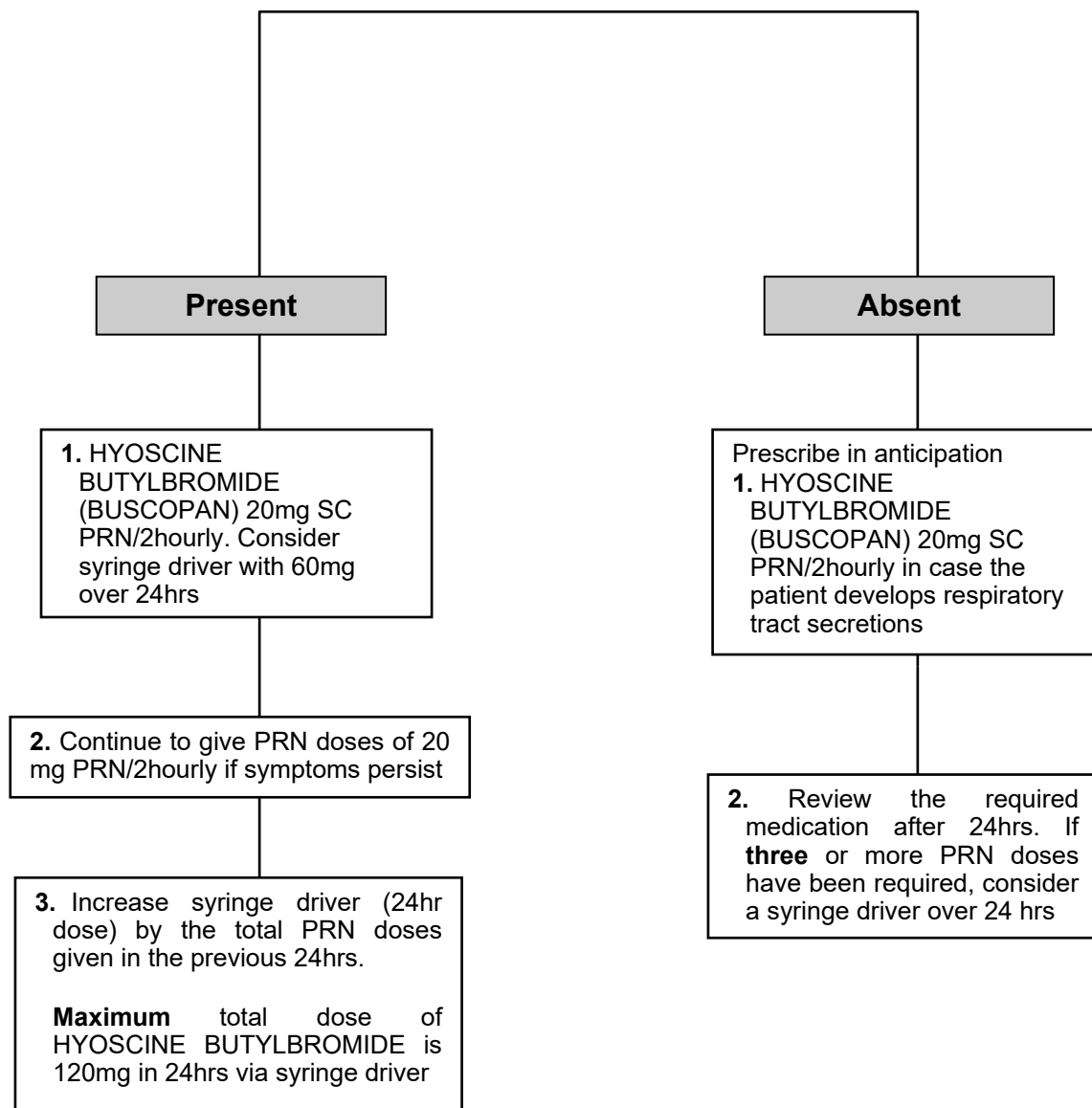
Terminal Agitation (Delirium and anxiety) Algorithm



SUPPORTIVE INFORMATION

- ***The maximum dose of SC HALOPERIDOL is 10mg in 24 hours.** Higher doses may be considered on specialist palliative care advice. Haloperidol should not be used in Parkinson's disease, please contact the Palliative Care Team for advice.
- ****The maximum dose of SC LEVOMEPRMAZINE is 200mg in 24 hrs.** Caution is required when using levomepromazine in patients with raised intracranial pressure and history of seizures, contact the Palliative Care Team for further advice.

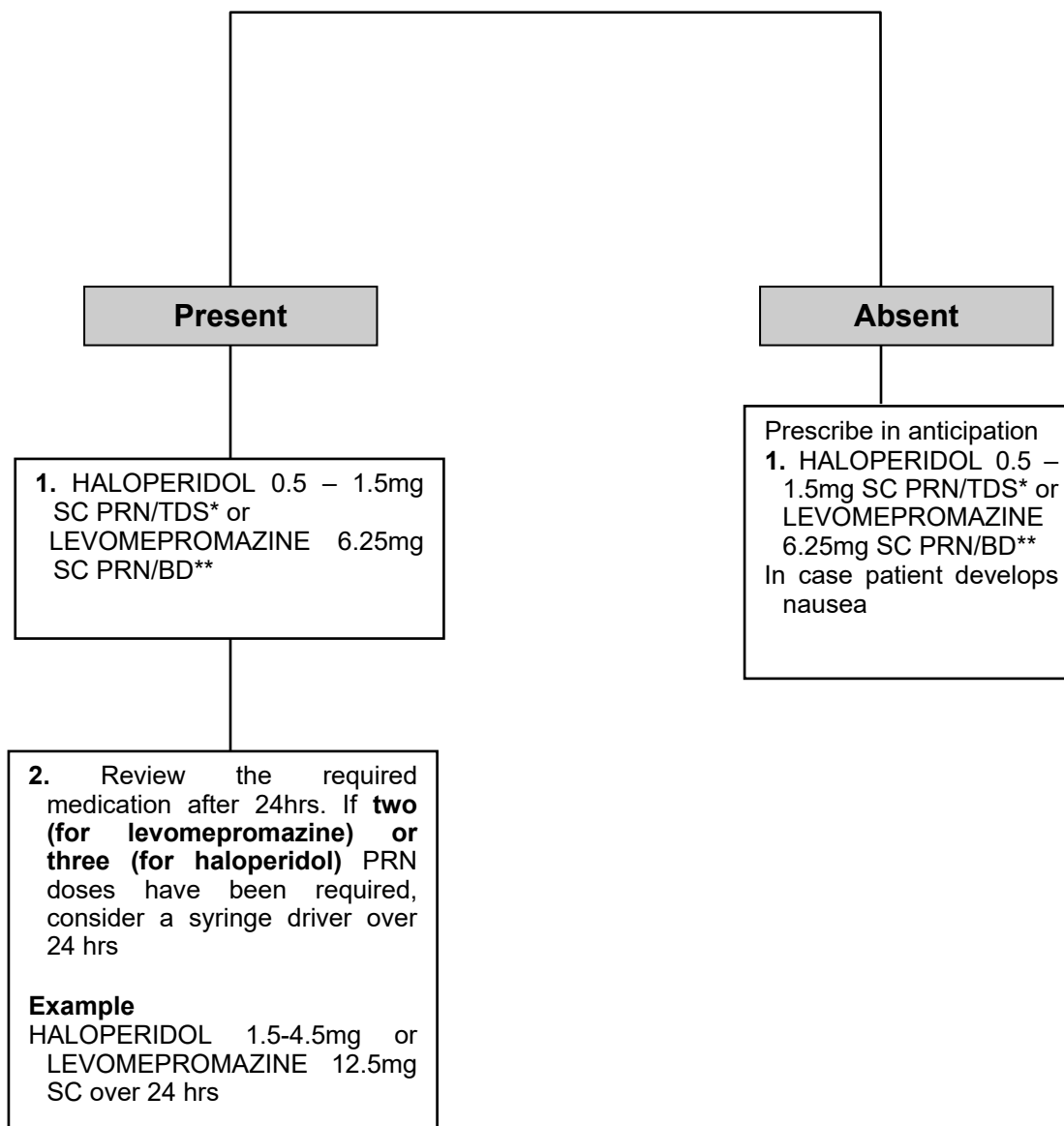
Respiratory Tract Secretions Algorithm



SUPPORTIVE INFORMATION

- GLYCOPYRRONIUM 200micrograms SC PRN/4hourly may be used as an alternative to HYOSCINE BUTYLBROMIDE with 600 - 1200micrograms over 24hrs via a syringe driver, if required.

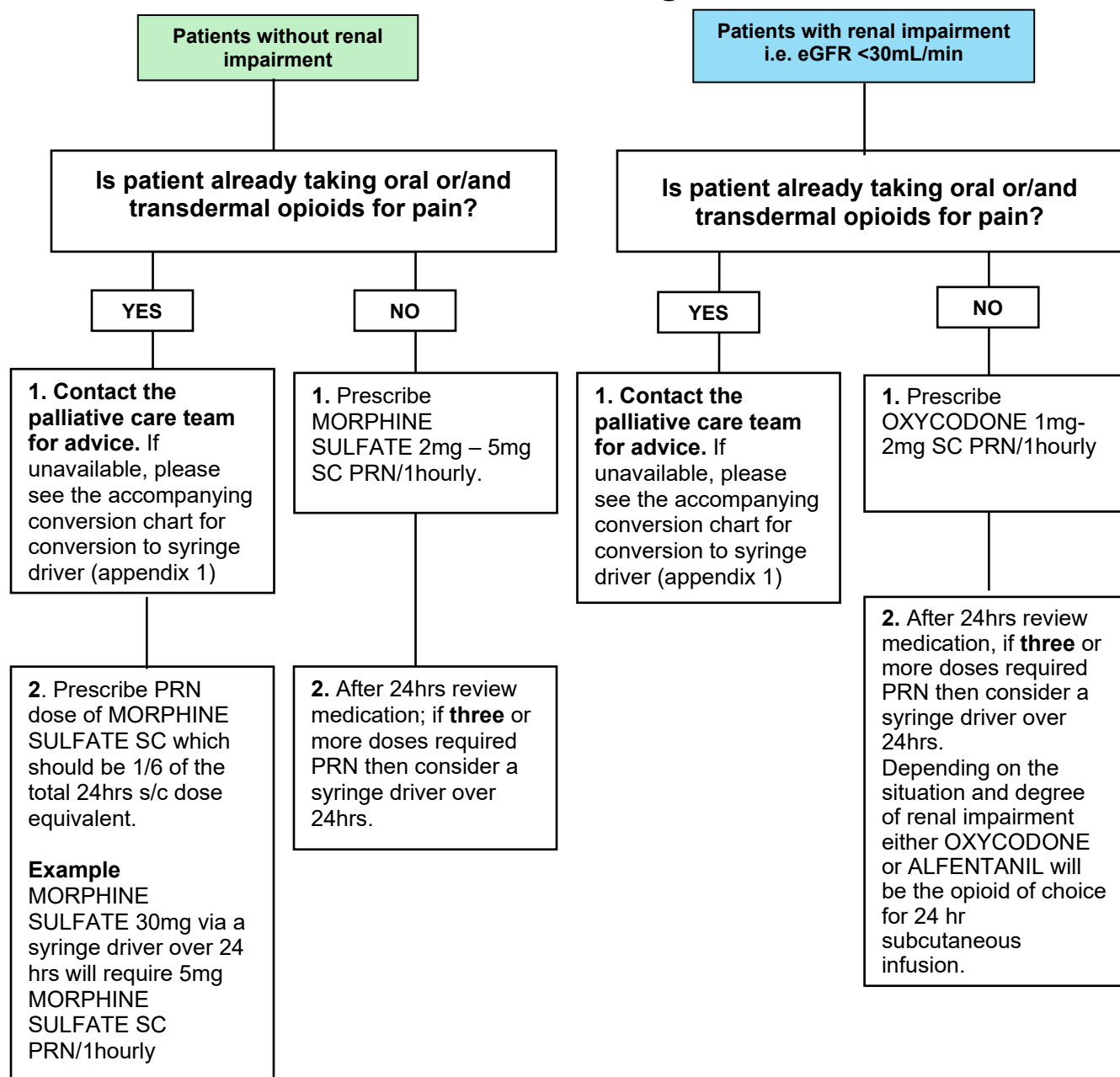
Nausea and Vomiting Algorithm



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- ****The maximum dose of SC LEVOMEPRMAZINE is 200mg in 24 hrs.** Caution is required when using levomepromazine in patients with raised intracranial pressure and history of seizures, contact the Palliative Care Team for further advice.

Breathlessness Algorithm



SUPPORTIVE INFORMATION

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References

1. Leadership Alliance for the Care of Dying People. One chance to get it right: Improving people's experience of care in the last few days and hours of life. Published online June 2014.
2. Wilcock A, Howard P, Charlesworth S. PCF 8: Palliative Care Formulary, Eight Edition. Pharmaceutical Press. 2022
3. Ellershaw JE, Lakhani M. Best care for the dying patient. *BMJ*. 2013;347. doi:10.1136/bmj.f4428
4. Sleeman KE, Collis E. Caring for a dying patient in hospital. *BMJ*. 2013;346:f2174. doi:10.1136/bmj.f2174
5. Albert R.H. End-of-life care: Managing common symptoms. *Am Fam Phys*. 2017;95(6):356-361.
6. Lindqvist O, Lundquist G, Dickman A, et al. Four Essential Drugs Needed for Quality Care of the Dying: A Delphi-Study Based International Expert Consensus Opinion. *Journal of palliative medicine*. 2012;16. doi:10.1089/jpm.2012.0205
7. National Institute for Health and Care Excellence. Care of dying adults in the last days of life | Guidance | NICE. Published online December 16, 2015. <https://www.nice.org.uk/guidance/ng31>
8. King S, Forbes K, Hanks GW, Ferro CJ, Chambers EJ. A systematic review of the use of opioid medication for those with moderate to severe cancer pain and renal impairment: a European Palliative Care Research Collaborative opioid guidelines project. *Palliat Med*. 2011;25(5):525-552. doi:10.1177/0269216311406313
9. Bush SH, Tierney S, Lawlor PG. Clinical Assessment and Management of Delirium in the Palliative Care Setting. *Drugs*. 2017;77(15):1623-1643. doi:10.1007/s40265-017-0804-3
10. Grassi L, Caraceni A, Mitchell AJ, et al. Management of delirium in palliative care: a review. *Curr Psychiatry Rep*. 2015;17(3):550. doi:10.1007/s11920-015-0550-8
11. Breitbart W, Marotta R, Platt MM, et al. A double-blind trial of haloperidol, chlorpromazine, and lorazepam in the treatment of delirium in hospitalized AIDS patients. *Am J Psychiatry*. 1996;153(2):231-237. doi:10.1176/ajp.153.2.231
12. Parry R, Seymour J, Whittaker B, Bird L, Cox KJ. *Rapid Evidence Review: Pathways Focused on the Dying Phase in End of Life Care and Their Key Components*. Loughborough University; 2013.
13. Sykes N, Thorns A. The use of opioids and sedatives at the end of life. *Lancet Oncol*. 2003;4(5):312-318. doi:10.1016/s1470-2045(03)01079-9
14. Lokker ME, van Zuylen L, van der Rijt CCD, van der Heide A. Prevalence, impact, and treatment of death rattle: a systematic review. *J Pain Symptom Manage*. 2014;47(1):105-122. doi:10.1016/j.jpainsymman.2013.03.011

15. Watson M, Armstrong P, Gannon C, Sykes N, Back I. Palliative Care Adult Network Guidelines Plus. Published 2020. Accessed July 20, 2020. <https://book.pallcare.info/index.php>
16. Ekström M, Allingham SF, Eagar K, Yates P, Johnson C, Currow DC. Breathlessness During the Last Week of Life in Palliative Care: An Australian Prospective, Longitudinal Study. *Journal of Pain and Symptom Management*. 2016;51(5):816-823. doi:10.1016/j.jpainsymman.2015.12.311
17. Jennings A-L, Davies AN, Higgins JPT, Gibbs JSR, Broadley KE. A systematic review of the use of opioids in the management of dyspnoea. *Thorax*. 2002;57(11):939-944. doi:10.1136/thorax.57.11.939
18. Barnes H, McDonald J, Smallwood N, Manser R. Opioids for the palliation of refractory breathlessness in adults with advanced disease and terminal illness. *Cochrane Database of Systematic Reviews*. 2016;(3). doi:10.1002/14651858.CD011008.pub2
19. Johnson MJ, Currow DC. Opioids for breathlessness: a narrative review. *BMJ Supportive & Palliative Care* 2020; 10:287-295.doi:10.1136/bmjSPACE-2020-002314

Appendix 1: Opioid dose conversion guide (approximate equivalent doses).

Adapted from Palliative Adult Network Guidelines¹⁵

Oral morphine		Subcutaneous morphine		Oral oxycodone		Subcutaneous oxycodone		Subcutaneous alfentanil
24 h total dose (mg)	4 h dose (mg)	24 h total dose (mg)	4 h dose (mg)	24 h total dose (mg)	4 h Dose (mg)	24 h total dose (mg)	4 h dose (mg)	24 h total dose (mg)
15	2.5	7.5	2.5*	7.5	1.25	3.75 - 5	1.25**	0.5 (or 500 micrograms)
30	5	15	2.5	15	2.5	7.5 - 10	1.25 – 2.5	1
60	10	30	5	30	5	15 - 20	2.5 - 5	2
120	20	60	10	60	10	30 - 40	5 - 7.5	4
180	30	90	15	90	15	40 - 60	7.5 - 10	6
240	40	120	20	120	20	60 - 80	10 - 15	8
4 hourly dose may also be used as medication dose for breakthrough pain								

* Starting dose of SC PRN morphine. **Starting dose of SC PRN oxycodone

Full version control record

Version:	6.0
Guidelines Lead(s):	Dr Beata LeBon, Consultant in Palliative Medicine
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Lead Director / Chief of Service:	Dr Lucy Abbott
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Version History

Version	Date	Guideline Lead(s)	Status	Comment
1	2013	Mr Bruce Montgomery, Mary Hayes, Dr Beata LeBon, Dr Nicholas Dando, Nicola Jenkins	Final	Ratified HEB Sept 2013 and DTC Oct 2013
2	Dec 2014	As above	Final	
3	Sept 2017	Mr Bruce Montgomery	Final	
4	February 2021	Dr Beata LeBon Dr Rowena Eason	Final	Via E governance process by EoLC Steering Group Nov 2020 Noted at FHFT DTC Dec 2020

5	February 2022	Dr Beata LeBon	Final	Via E governance process by Palliative Care Clinical Governance Group Feb 2022
6	June 2024	Dr Beata LeBon	Final	Addition of renal impairment to pain and breathlessness algorithms

Related Documents

Document Type	Document Name
Guideline	Care of the Dying Adult Patient
Guideline	My Care Plan (FHFT personalised plan of care for the last days of life)