ANTICIPATORY MEDICATION GUIDELINES

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Group, Directorate and Specialty	Primary Care, Communities and Therpaies
Approving body and date of approval	PCCT Quality and Safety Committee Medicine Prescribing and Effectiveness Committee
DTC approval date	Dec 2020
Guideline reference	SWBH/PTCARE/102
Date uploaded onto Connect	14th January 2021 9th Sept 2023 Weblinks and contact details updated
Next review date	January 2024

Consultation process:

- This is an update so the whole palliative care team have seen this, plus consultants**.**

If review of existing guideline what has been changed:

- Minor update in current practice

What National Guidance has been incorporated?

- West Midlands Palliative Medicine Physicians Guidelines for Symptom Control

Scope (who does the guidelines apply to or not apply to):

- Nurses; Community and Acute
- Doctor; Hospital and GPs
- Pharmacy

DOCUMENT CONTROL AND HISTORY

Version No	Date Approved	Date of implementation	Next Review Date	Reason for change (e.g. full rew rite, amendment to reflect new legislation, updated flow chart, etc.)
1	May 2009	May 2009	May 2012	Full review
2	September 2013	September 2013	September 2016	
3	May 2017	May 2017		
4	Dec 2020	Jan 2021	January 2024	Update

1. Anticipatory Medication Guidelines

Symptoms commonly experienced by patients entering the terminal phase include pain, agitation, nausea, vomiting, breathlessness and excessive chest secretions.

To provide prompt and effective symptom control and to reduce distress and anxiety for patients and their carers, it is advocated that medications used to manage these symptoms are prescribed in anticipation of need.

The following table outlines common doses of drugs used to treat the above symptoms and is for use in all settings. It should however only be used as a guideline. For further information, or if symptoms not managed, please consult the palliative care team or your pharmacist.

These medications are prescribed in anticipation of patient being unable to swallow their regular symptom control medications, and given by the subcutaneous (SC) route if needed when unable to take by oral route.

For the purposes of this document, the dying phase is considered to be a prognosis of less than six weeks, or if 'phase of illness' ranking is used then when patient considered to be 'deteriorating' or 'dying' (further guidance on recognising the dying phase).

Symptom	Drug	Dose	Route	Notes
Pain (eGFR >30 ml/min/1.73m^2)	Morphine sulfate	2.5mg– 5 mg	Subcutaneous injection	If patient already taking regular morphine the PRN dose is usually 1/6th of the 24-hour opioid dose. For patients receiving alternative opioids please contact the palliative care team or pharmacist for advice.
Pain (eGFR <30 ml/min/1.73m^2)	Fentanyl	25 micrograms	Subcutaneous injection	As required
Agitation	Midazolam	2.5mg– 5 mg *(If eGFR <30 ml/min/1.73m^2 dose reduction to 1.25–2.5 mg)	Subcutaneous injection	To be given as required. Maximum 30 mg in 24 hours – may go higher with specialist advice N.B. if eGFR <30 ml/min/1.73m^2 Maximum 30mg in 24 hours
Nausea and vomiting	Levomepromazine	2.5mg–5 mg	Subcutaneous injection	Four hourly as required. Maximum dose 25 mg in 24 hours
Chest Secretions	Hyoscine butylbromide	20mg	Subcutaneous injection	Two hourly as required. Maximum dose 180 mg in 24 hours
Breathlessness	Morphine sulfate	2.5mg-5mg	Subcutaneous injection	As required
Breathlessness eGFR <30 ml/min/1.73m^2	Fentanyl	12.5–25 micrograms	Subcutaneous injection	As required

2. OPIOID CONVERSION: Anticipatory medication

There is no exact equivalent between opioids, starting low and titrating upwards is recommended safe practice.

Approximately equivalent opioid doses for PRN use:

Oral morphine	Morphine injection	Fentanyl injection For patient with renal impairment (eGFR<30 ml/min/1.73m^2)
5 mg	2.5 mg	25 micrograms
10 mg	5 mg	50 micrograms

DO NOT use these equivalent doses for larger doses without specialist palliative advice, as the small numbers entailed have been rounded up.

Approximately equivalent opioid doses for starting doses in subcutaneous infusions:

Oral morphine in 24 hours	Morphine injection via CSCI	Fentanyl injection via CSCI
30 mg	15 mg	150 micrograms
60 mg	30 mg	300 micrograms

Opioid choice in pre–existing renal impairment: DO NOT use morphine in continuous infusion for patients with known renal impairment (eGFR <30 ml/min/1.73m^2) because of the high risk of accumulation and adverse effects.

However it is **not** necessary to routinely check the renal function of all dying patients who are comfortable on their regular opioid - even if they develop undetected renal impairment, it may not be necessary to convert to an alternative unless they develop side effects or signs of opioid toxicity such as myoclonic jerks; please note drowsiness and reduced consciousness can be part of the dying process and doesn't necessarily mean the person is opioid toxic.

Fentanyl excretion is not affected by renal impairment, therefore it is less likely to cause side effects and opioid toxicity due to accumulation in this situation, and is the drug of choice for continuous subcutaneous infusion.

Seek Specialist Palliative Care Advice: If converting from alternative strong opioids, if analgesia requirements are escalating or distressing opioid side effects or alfentanil (an alternative opioid) is prescribed. Fentanyl and alfentanil are **not** interchangeable as the doses are not equivalent.

CSCI = Continuous Subcutaneous Infusion

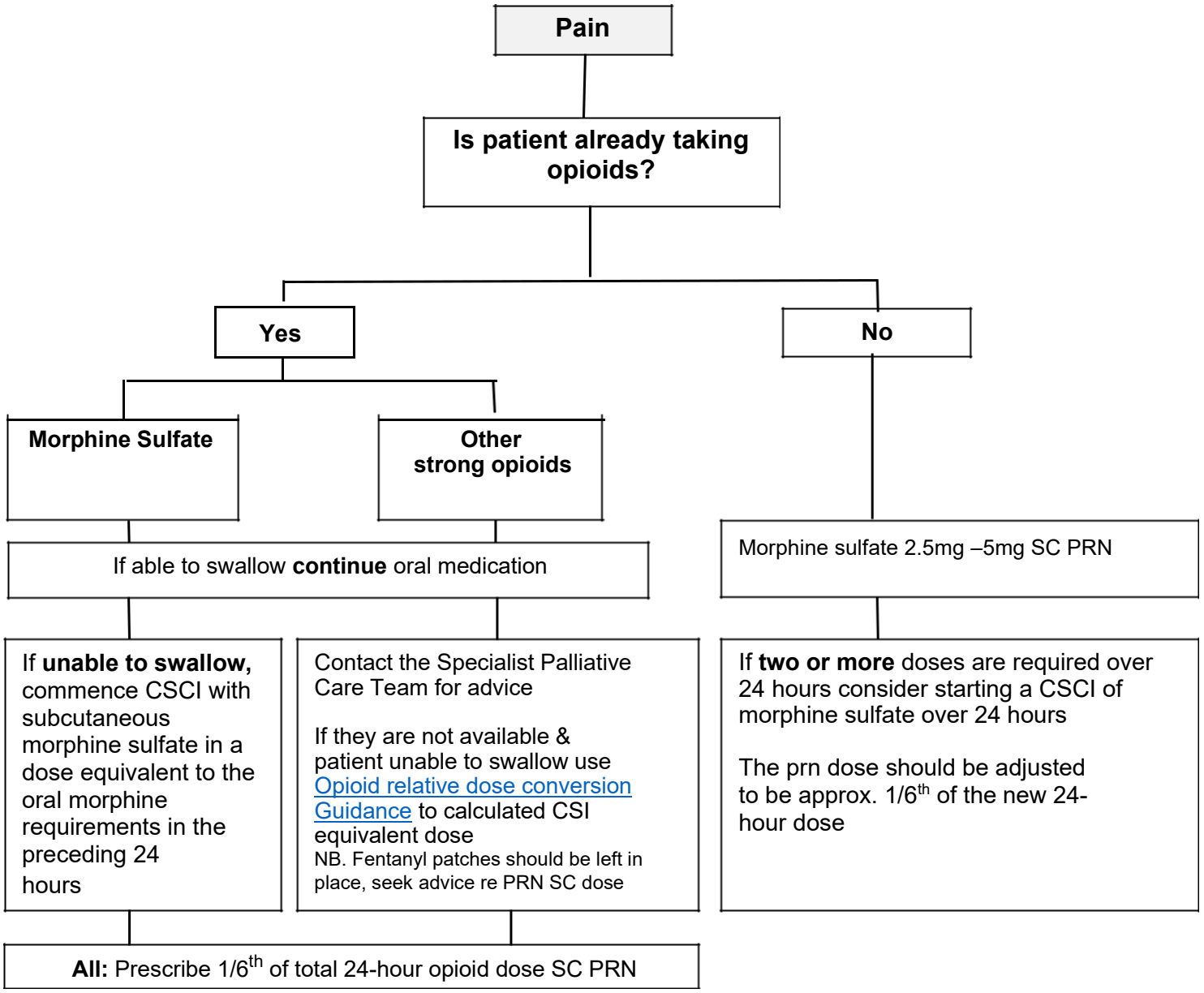
Further information:

West Midlands Palliative Care Physicians Symptom Control Guidelines

Connected Palliative Care: 0121 507 2664 option 2

Algorithm for Pain in patients in the DYING PHASE using morphine sulfate SUBCUTANEOUSLY (eGFR >30 ml/min/1.73m2)

Explanation & psychological support for patient/carers /family	**Exclude treatable causes for pain e.g. constipation**	**Consider positioning for comfort**



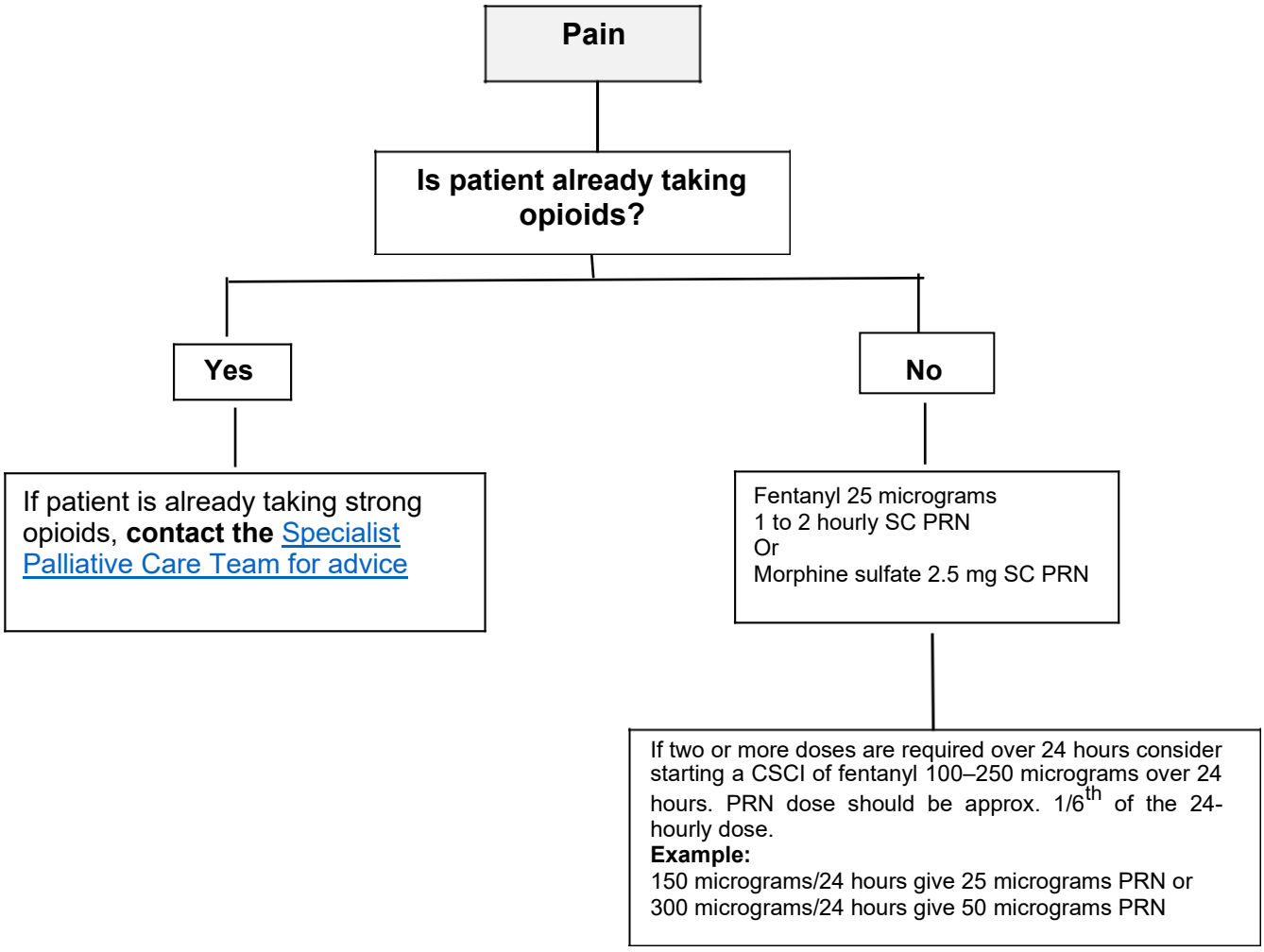
Example conversions:

1. To calculate the equivalent total 24 hourly dose of SC morphine, divide total 24 hourly dose of regular oral morphine plus sum total of morphine sulfate liquid PRNs used by 2 (e.g. 20 mg oral morphine = 10 mg SC morphine)
2. To calculate the breakthrough dose of morphine sulfate divide total 24-hourly dose of SC morphine by 6 and prescribe this dose, SC PRN (e.g.15 mg SC morphine over 24 hours = 15 mg/6 = 2.5 mg SC PRN)

Review pain at each visit - if more than 2 PRN doses used in 24 hours, consider if 24 hour CSCI needs to be increased or seek specialist advice.

Algorithm for Pain in patients with renal impairment (eGFR <30 ml/min/1.73m^2) in the DYING PHASE using FENTANYL SUBCUTANEOUSLY

Explanation & psychological support for patient/carers /family	**Exclude treatable causes for pain e.g., constipation**	**Consider positioning for comfort**

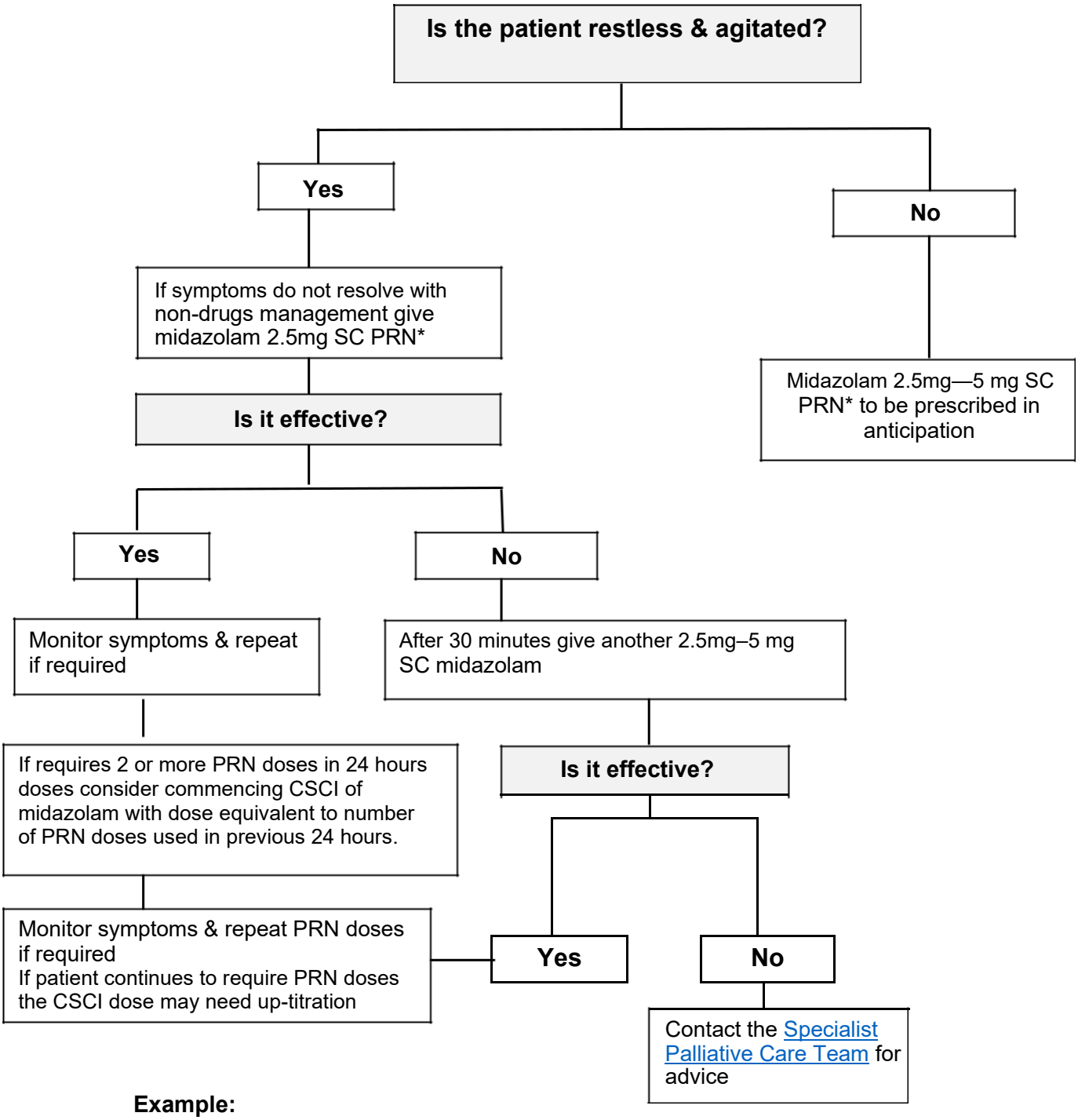


Starting dose of fentanyl CSCI: this should be based on prior opioid requirements and titrated upwards according to the amount of subsequent PRN doses required *in addition* to the continuous infusion – there is no upper limit provided the pain is responding well to the opioid and there are no symptoms or signs of adverse effects or toxicity.

Breakthrough analgesia accompanying fentanyl CSCI: use of fentanyl for 'as required' doses is limited by the volume of solution required at higher doses – do not give more than 100 micrograms at once. An alternative is to use low dose alternative subcutaneous opioid e.g., morphine sulfate.

Algorithm for Agitation in patients in the DYING PHASE

Explanation & psychological support for patient/carers /family	Exclude causes of delirium e.g. constipation, urinary retention, hypercalcemia, nicotine withdrawal	Consider environmental modifications & non-drug management

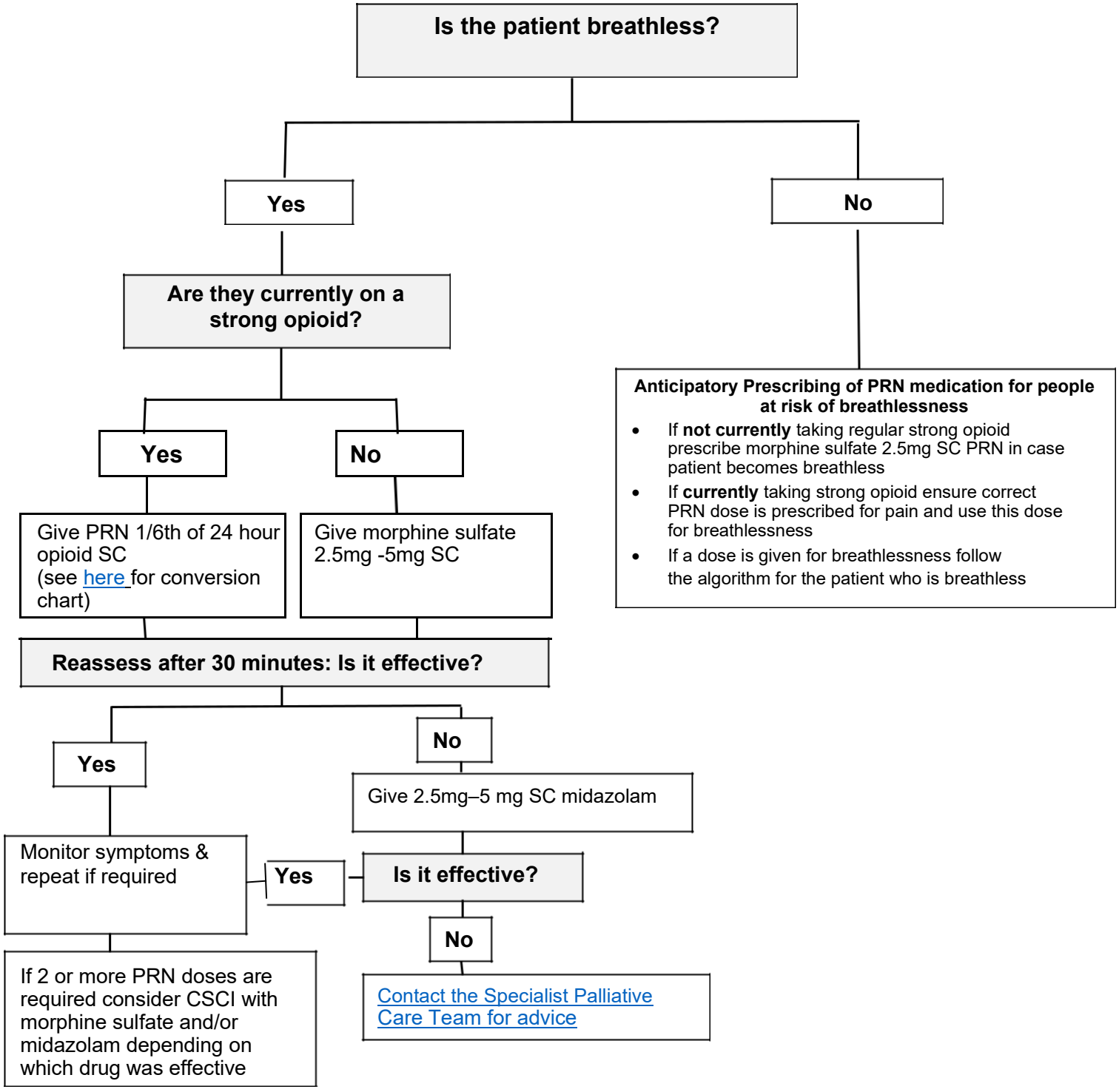


Example:
If patient has required 4 doses of 2.5 mg midazolam to manage restlessness in previous 24 hours then a suitable dose would be 10 mg midazolam in CSCI over 24hours.

*If eGFR <30 ml/min/1.73m^2 dose give reduced dose of midazolam 1.25mg–2.5 mg

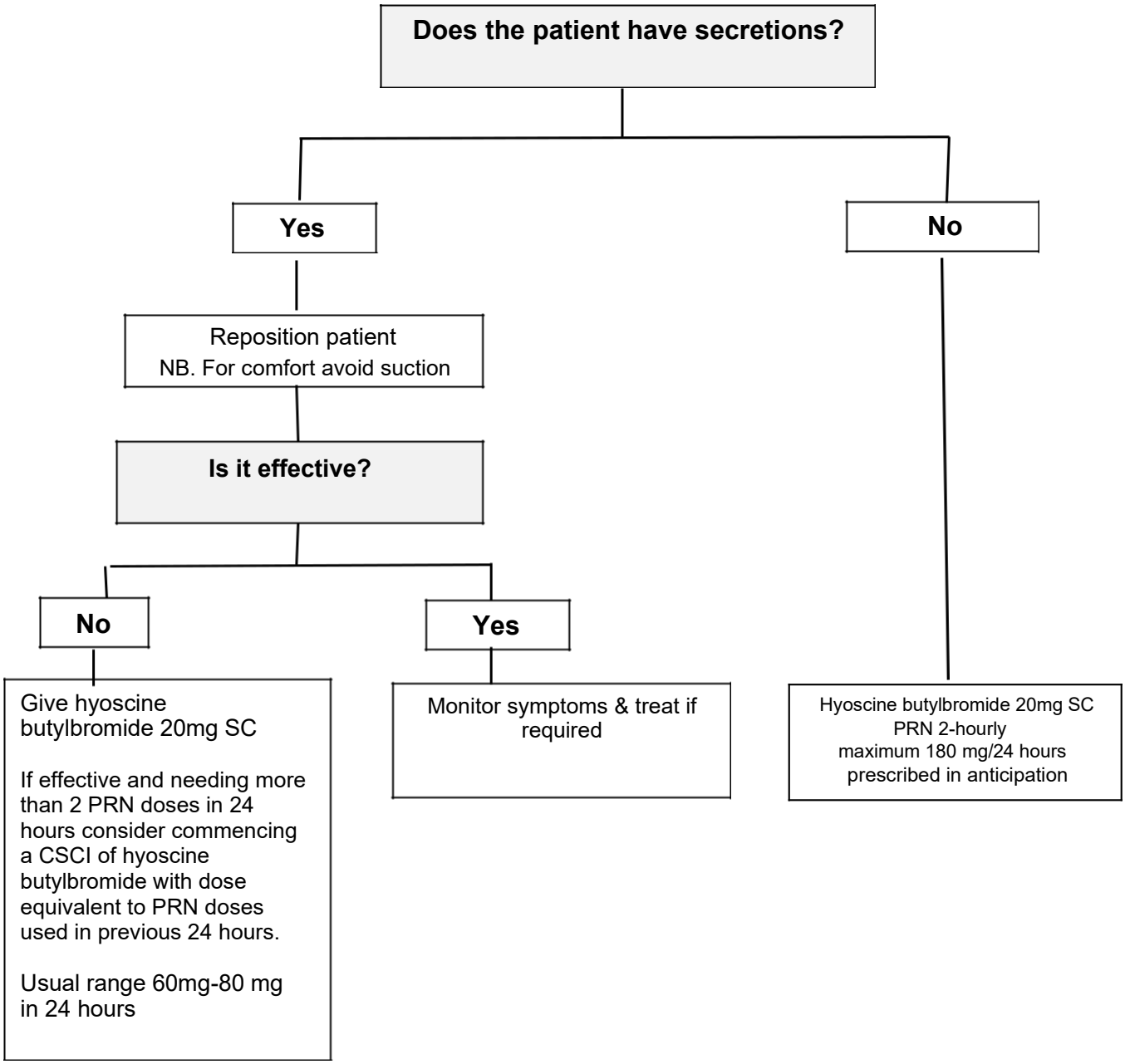
Algorithm for breathlessness in patients in the DYING PHASE

Explanation & psychological support for patient/carers /family	**Consider causes pleural effusion, heart failure pneumonia & treat if appropriate Check blood oxygen levels consider if oxygen appropriate**	**Non pharmacological approaches e.g. positioning, reduce room temperature ,cooling the face by using a cool flannel or cloth**



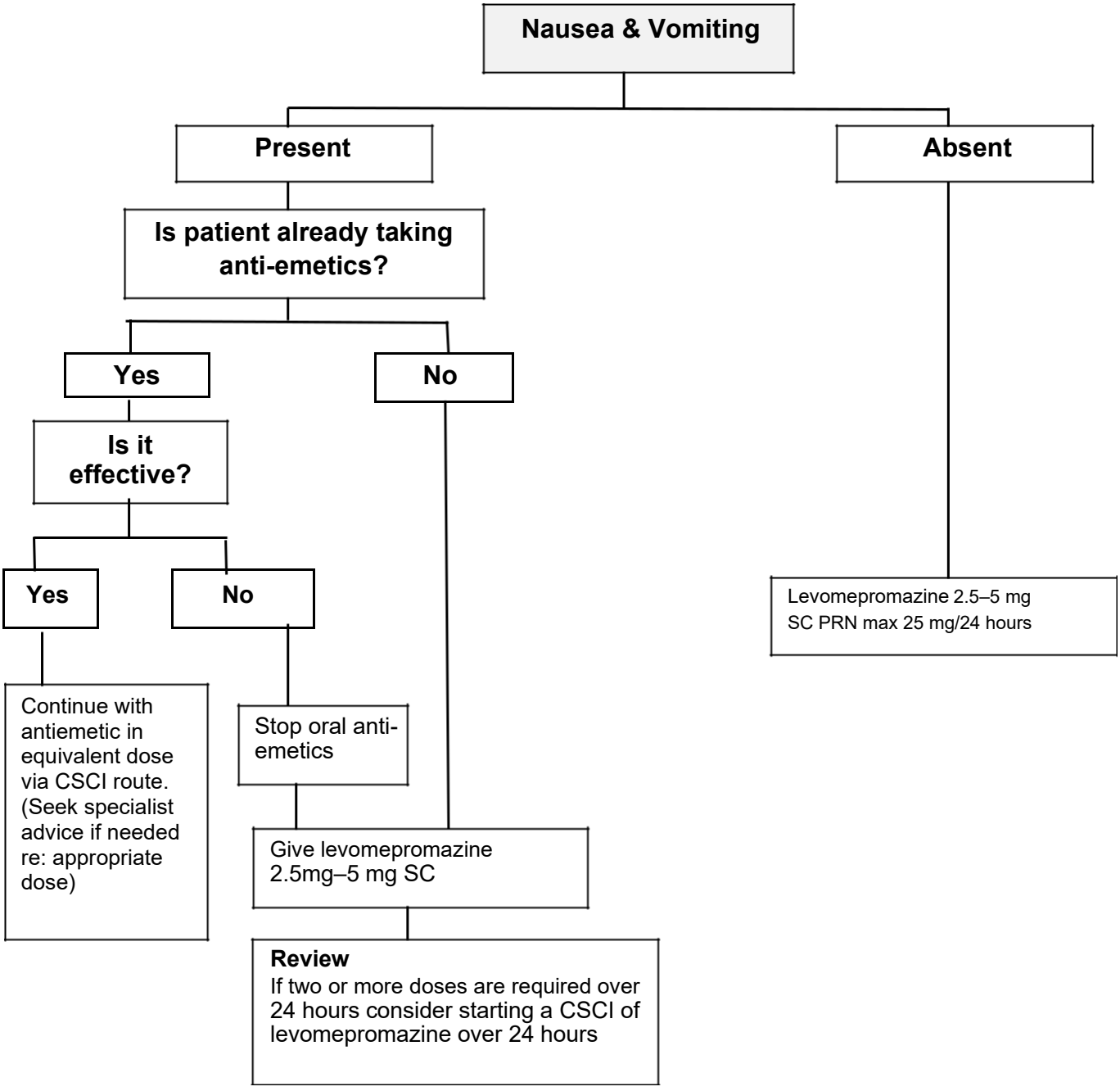
Algorithm for respiratory secretions in patients in the DYING PHASE

Explanation & psychological support for patient/carers/family	**Exclude causes of fluid overload e.g., ongoing parenteral fluids, chest infection, nasogastric feed, humidified oxygen**	**Consider repositioning**



Algorithm for nausea and vomiting in patients in the DYING PHASE

Explanation & psychological support for patient/carers /family	**Exclude treatable causes e.g., constipation, hypercalcaemia, bowel obstruction**	**Consider strategies to keep away triggers e.g., strong smells**



References

West Midlands Palliative Care Physicians Symptom Control Guidelines