Coventry & Warwickshire Area Prescribing Committee

Clinical Guideline – CG040

General Prescribing Guidance for the Dying Person.

To be used in conjunction with the Individual Plan of Care for the Dying Person.

Palliative Care team contact details refer to own trust guidance

General Information

Patients should continue to take oral medication as long as it is practical but it is well known that this may not be possible in the final few days/ hours of life.
It is important to plan early to avoid distress and delay for the patient and family.

Medications should be reviewed to ensure that

- Non-essential medications are stopped
- Essential medication is prescribed by appropriate routes to provide symptom control with minimal discomfort
- Anticipatory medication is prescribed to manage the 5 common symptoms in the last days of life (pain, nausea/vomiting, delirium/agitation, breathlessness and respiratory secretions) which allows healthcare professionals to respond quickly to maintain dignity and comfort.

During working hours the Palliative Care team is available for advice where symptoms are difficult to manage. Out of working hours an on-call service is also available for advice.
Contact details are available on the front of this document for corresponding organisation

Continuous Subcutaneous Infusion

For the majority of drugs administration via this method is unlicensed but is recognised as acceptable practice.
Compatibility data for mixing medication is available but if in any doubt please contact Pharmacy or the Palliative Care team for advice.
Patients and relatives need to understand why this method is being used, the advantages and disadvantages and how the driver works. They also need to know who and how to contact if the driver fails.

Advantages	Disadvantages
Constant infusion to control symptoms	Lack of data to mix some medication
Can combine medication to control more than one symptom	Possible inflammation at injection site
Avoids multiple injections	Needs Training of staff
Portable	
Generally once a day	

Compatibility charts in each diluent is available at the end of this booklet

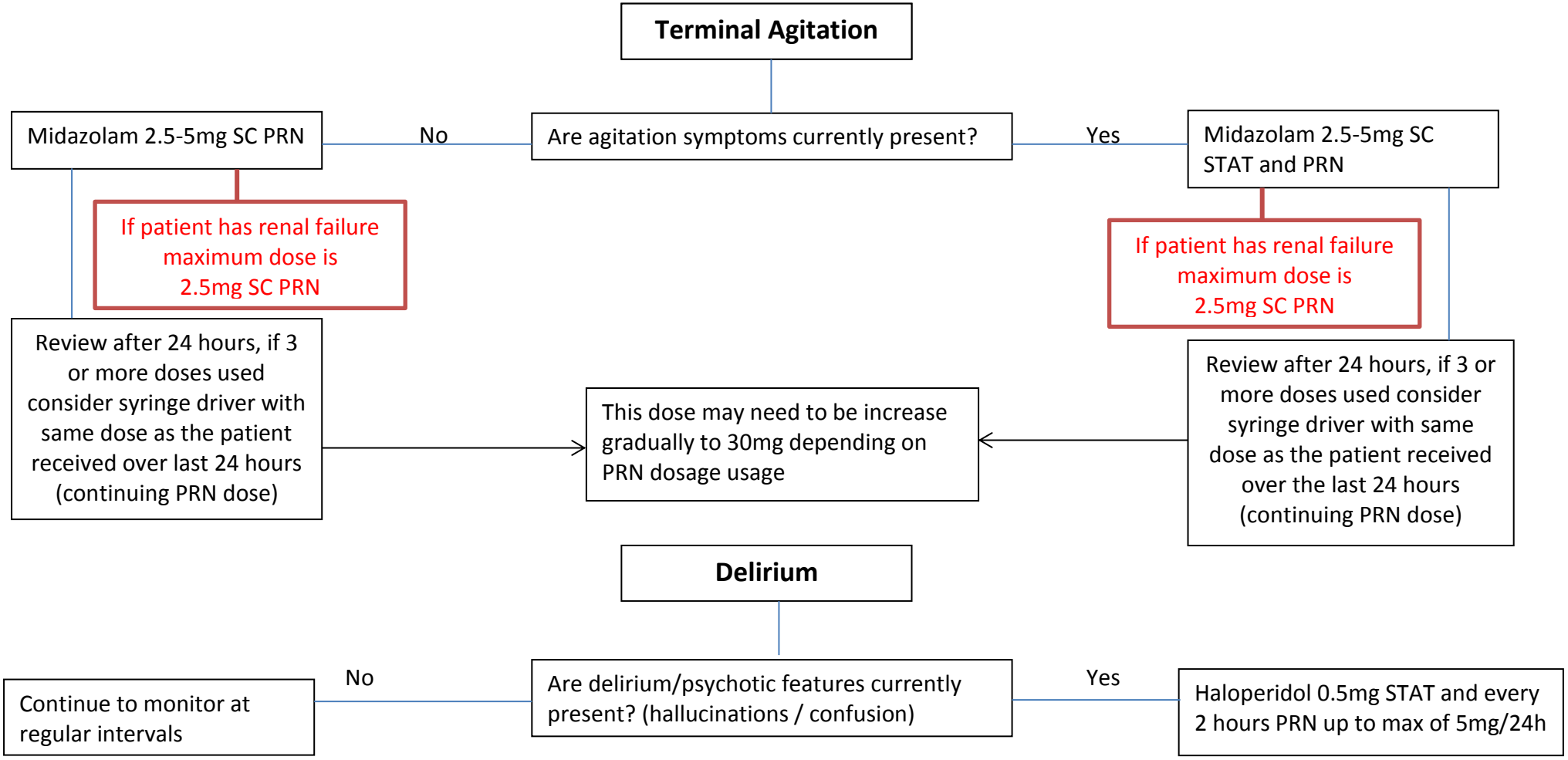
Patients may be on different opioids and therefore conversion between them may be necessary when starting an infusion. Conversion charts are available in the West Midlands Palliative Care Guidelines and advice can always be sought from the Palliative Care team if needed.
Use of continuous infusions allows medications to be given slowly 24 hours a day, constantly relieving the symptoms of the patient. If the patient requires medication over and above this dose an “as required” or “interval” medication will be prescribed.
Please refer to local policy for set up and use of syringe drivers
A district nurse requires an authorisation sheet to set up the syringe driver or give an “as required” dose.

“As required” medication

As with continuous infusions, for the majority of drugs administration via this method is unlicensed but is recognised as acceptable practice.
Some medications do not need to be given over 24 hours and can be given as a once daily subcutaneous injection, such as dexamethasone.

Terminal Restlessness and Agitation

Attempt non-pharmacological treatments to make patient comfortable as much as possible; a human presence often helps to calm patients.
(Reposition, full bladder, constipated, dyspnoea)

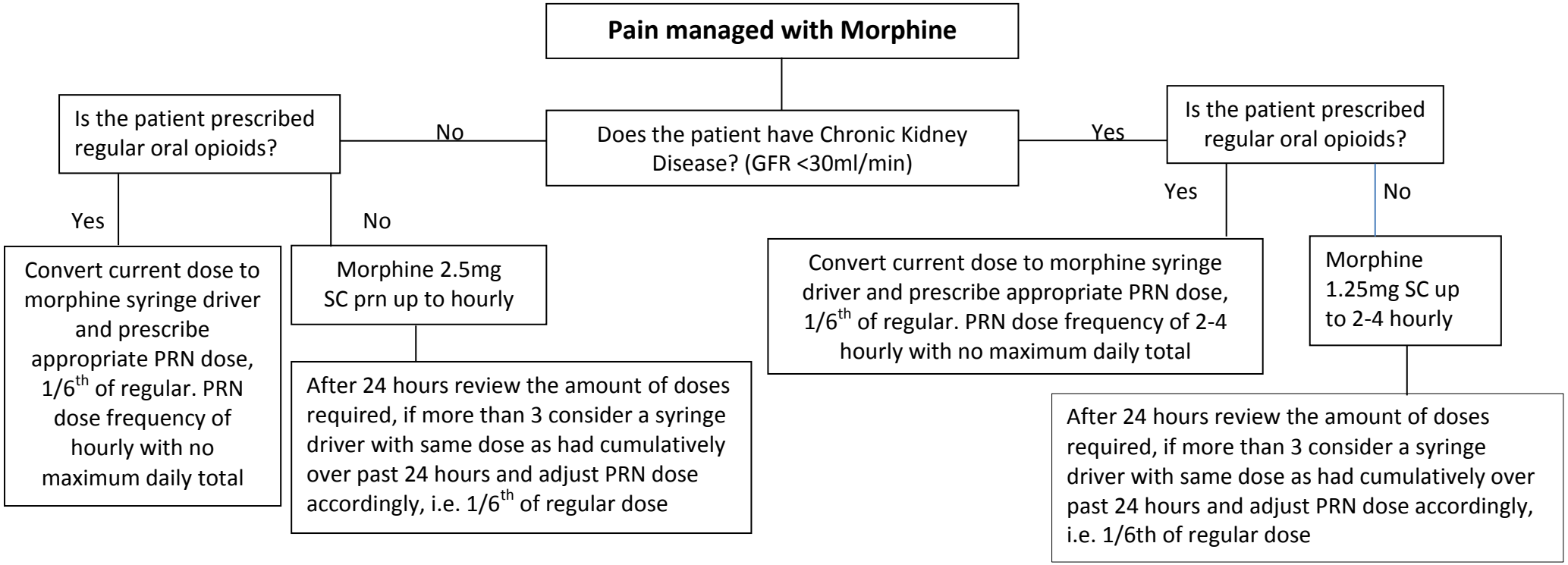


Consider use of both Midazolam and Haloperidol if required.
If symptoms persist contact the Palliative care team (contact details on front page)

Pain managed with Morphine

Morphine is the most cost effective opioid available and should be the drug of choice in line with NICE guidance. There is no difference in efficacy between Morphine and Diamorphine if used at equivalent doses.
If patient has intolerable side effects, or requires a dose above 100mg in the syringe driver, use diamorphine due to volume of Morphine solution being given subcutaneously is too large for the PRN doses i.e. more than 1ml. Avoid using different opioids at the same time wherever possible.

Attempt non-pharmacological treatments to make patient comfortable as much as possible
(such as relaxation and repositioning)



Opioids are strongly emetogenic- If patient is opioid naïve co-prescribe an anti-emetic such as haloperidol- See Nausea and Vomiting guidance
Monitor patient for signs of opioid toxicity (myoclonic jerks, decreased respiratory rate, sedation not associated with current condition)
Consider decreasing the current opioid dose and contact the Palliative Care team for advice.
If symptoms persist contact the Palliative care team (contact details on front page)

Pain managed with Diamorphine

Morphine is the most cost effective opioid available and should be the drug of choice in line with NICE guidance. There is no difference in efficacy between Morphine and Diamorphine if used at equivalent doses.
If patient has intolerable side effects, or requires a dose above 100mg in the syringe driver, use diamorphine due to volume of Morphine solution being given subcutaneously is too large for the PRN doses i.e. more than 1ml. Avoid using different opioids at the same time wherever possible.

Attempt non-pharmacological treatments to make patient comfortable as much as possible
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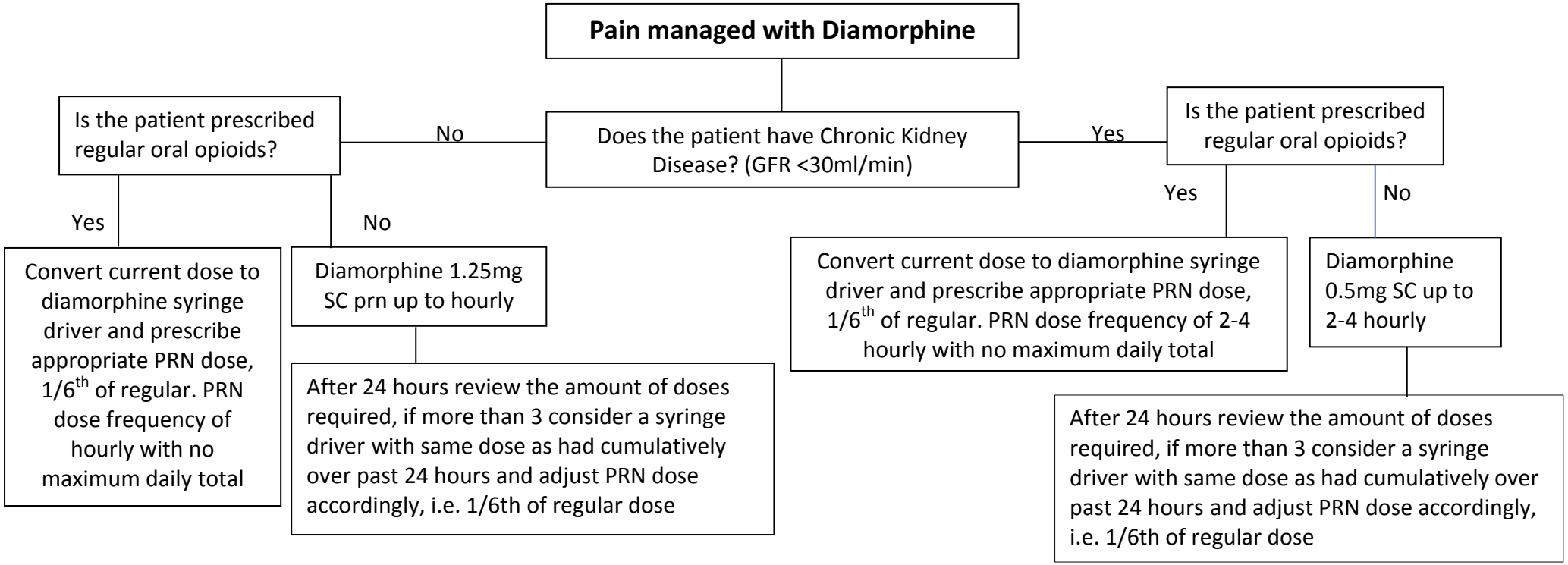

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Monitor patient for signs of opioid toxicity (myoclonic jerks, decreased respiratory rate, sedation not associated with current condition)
Consider decreasing the current opioid dose and contact the Palliative Care team for advice.
If symptoms persist contact the Palliative care team (contact details on front page)

When converting oral morphine to a subcutaneous infusion of morphine, the total 24 hour dose of morphine is divided by 2

For example: A patient taking 60mg MST BD will take 120mg morphine orally in 24 hours.
The dose of subcutaneous morphine over 24 hours is 120/2= 60mg morphine over 24 hours.

The breakthrough dose is calculated by dividing the 24 hour dose of subcutaneous morphine by 6.
The breakthrough dose of morphine is 60/6= 10mg sc morphine as needed up to every hour

When converting oral morphine to a subcutaneous infusion of diamorphine, the total 24 hour dose of morphine is divided by 3

For example: A patient taking 60mg MST BD will take 120mg morphine orally in 24 hours.
The dose of subcutaneous diamorphine over 24 hours is 120/3= 40mg diamorphine over 24 hours.

The breakthrough dose is calculated by dividing the 24 hour dose of subcutaneous diamorphine by 6.
The breakthrough dose of diamorphine is 40/6= 6.67mg, rounded up to 7mg sc diamorphine as needed up to every hour

When converting oral oxycodone to a subcutaneous infusion of oxycodone, the total 24 hour dose of oxycodone is divided by 2

For example: A patient taking 40mg Oxycodone MR BD will take 80mg oxycodone orally in 24 hours.
The dose of subcutaneous oxycodone over 24 hours is 80/2= 40mg oxycodone over 24 hours.

The breakthrough dose is calculated by dividing the 24 hour dose of subcutaneous oxycodone by 6.
The breakthrough dose of oxycodone is 40/6= 6.67mg, rounded up to 7mg sc oxycodone as needed up to every hour

Approximate equivalent doses of opioids in chronic usage

Analgesic	Approximate equivalence to 10mg oral morphine on repeated dosing		Duration of action
	Oral dose	IM/SC dose	
Morphine	10mg	5mg	3–6 hours
Alfentanil (injectable)	–	0.3mg = 300 micrograms Seek specialist palliative care advice (see also page 18)	30 minutes IM 60 minutes SC
Buprenorphine (sublingual)	0.2mg = 200 micrograms	–	6–8 hours
Codeine #	100mg	–	3–5 hours
Diamorphine	–	3mg	3–4 hours
Dihydrocodeine	100mg	–	4–6 hours
Fentanyl (injectable)	–	Seek specialist palliative care advice (see also page 19)	1–2 hours IM
Hydromorphone	1.3mg	0.6 mg = 600 micrograms	3–4 hours
Methadone	Prolonged plasma half-life leads to accumulation on repeated dosing. Requires titration under specialist supervision. Seek specialist palliative care advice.		
Oxycodone	5mg*	2.5	4–6 hours
Tramadol	100mg	–	4–5 hours

** Manufacturers guidelines of 2:1 ratio of oxycodone : morphine (note other conversions use a 1.5:1 ratio for oxycodone : morphine)* [5]

 # = Determined for parenteral but also appears to apply to oral route

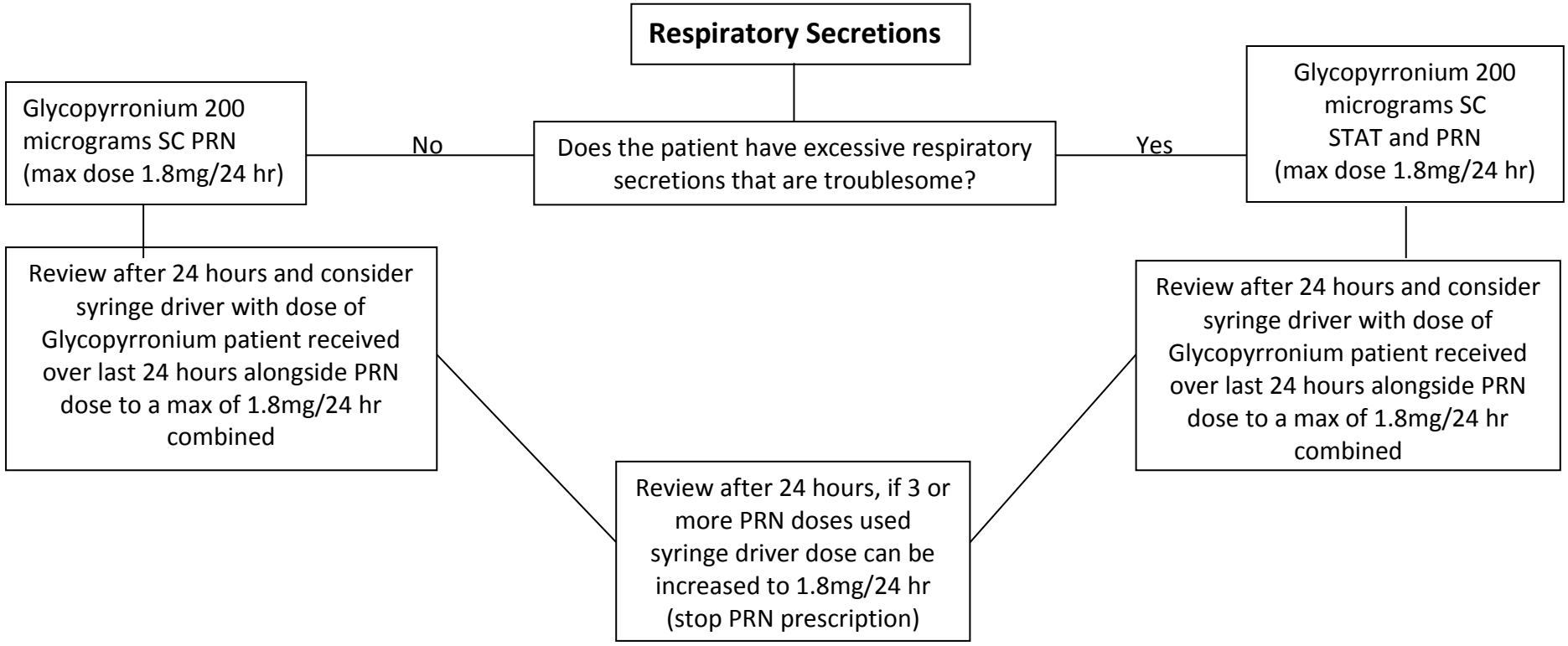
IM – intramuscular
SC – subcutaneous

Respiratory Secretions managed with Glycopyrronium

Glycopyrronium is the drug of choice and should be used wherever possible. There is no evidence that if Glycopyrronium treatment is not successful in controlling symptoms switching to another drug will be any more effective. This is a very difficult symptom to control and medication may not be effective. Remember to reassure family.

Attempt non-pharmacological treatments to make patient comfortable as much as possible such as tilting chin inwards at 30° angle and stopping artificial hydration and nutrition. A semi-recumbent position will sometimes help

Noisy respiratory tract secretions can be a normal part of dying- consider whether they are troublesome and need treating at all



If symptoms persist contact the Palliative care team (contact details on front page)

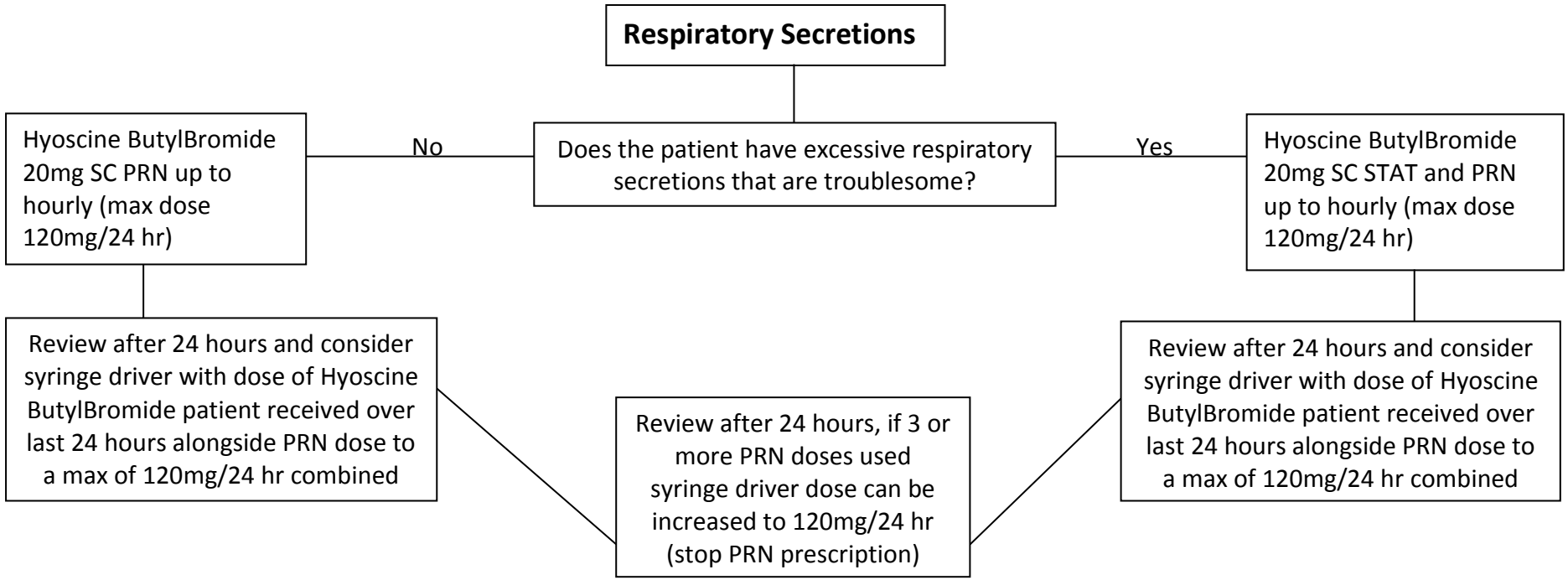
Respiratory Secretions managed with Hyoscine ButylBromide (Buscopan)

Glycopyrronium is the drug of choice and should be used wherever possible. There is no evidence that if Glycopyrronium treatment is not successful in controlling symptoms switching to another drug will be any more effective.

This algorithm is for when Glycopyrronium is not available for any reason.

This is a very difficult symptom to control and medication may not be effective. Remember to reassure family. Noisy respiratory tract secretions can be a normal part of dying- consider whether they are troublesome and need treating at all.

Attempt non-pharmacological treatments to make patient comfortable as much as possible such as tilting chin inwards at 30° angle and stopping artificial hydration and nutrition. A semi-recumbent position will sometimes help



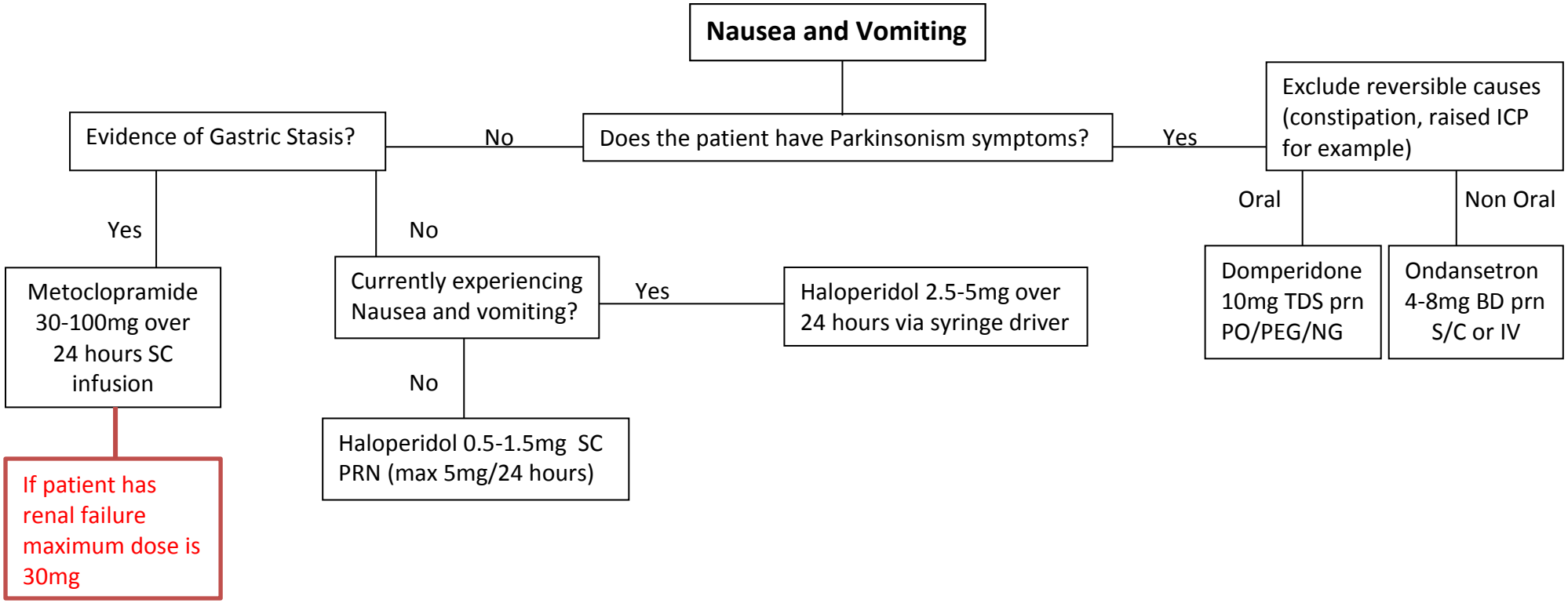
If symptoms persist contact the Palliative care team (contact details on front page)

PLEASE NOTE: HYOSCINE BUTYLBROMIDE AND HYOSCINE HYDROBROMIDE ARE DIFFERENT MEDICATIONS AND SHOULD NOT BE USED INTERCHANGEABLY. DOSES ARE DIFFERENT AND IT IS DANGEROUS TO DO SO.

AVOID THE USE OF HYOSCINE HYDROBROMIDE DUE TO RISK OF AGITATED CONFUSION/ SEDATION

Nausea and Vomiting

All patients that are opioid naïve and are now prescribed pain relief or dyspnoea management with opioids should be prescribed anti-emetics as prophylaxis.
Attempt non-pharmacological treatments to make patient comfortable as much as possible
(such as opening window, supressing smells, sips of water if not Nil By Mouth)

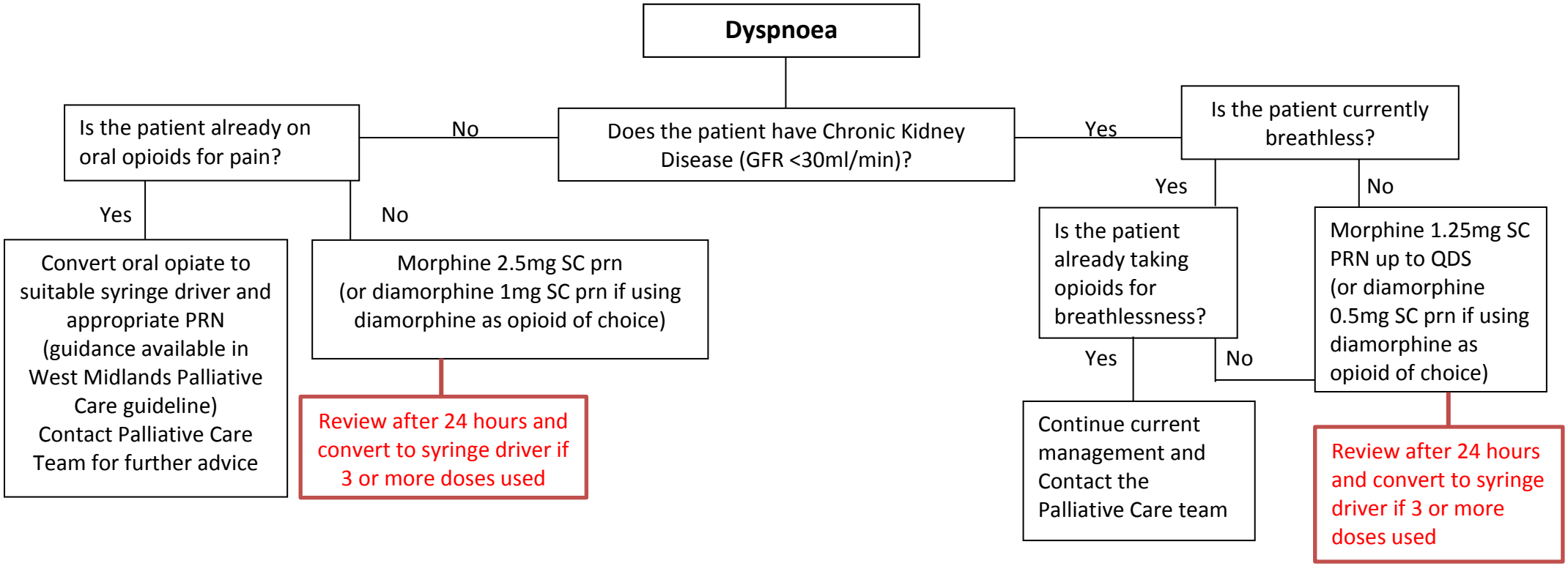


If symptoms persist contact the Palliative care team (contact details on front page)

Dyspnoea

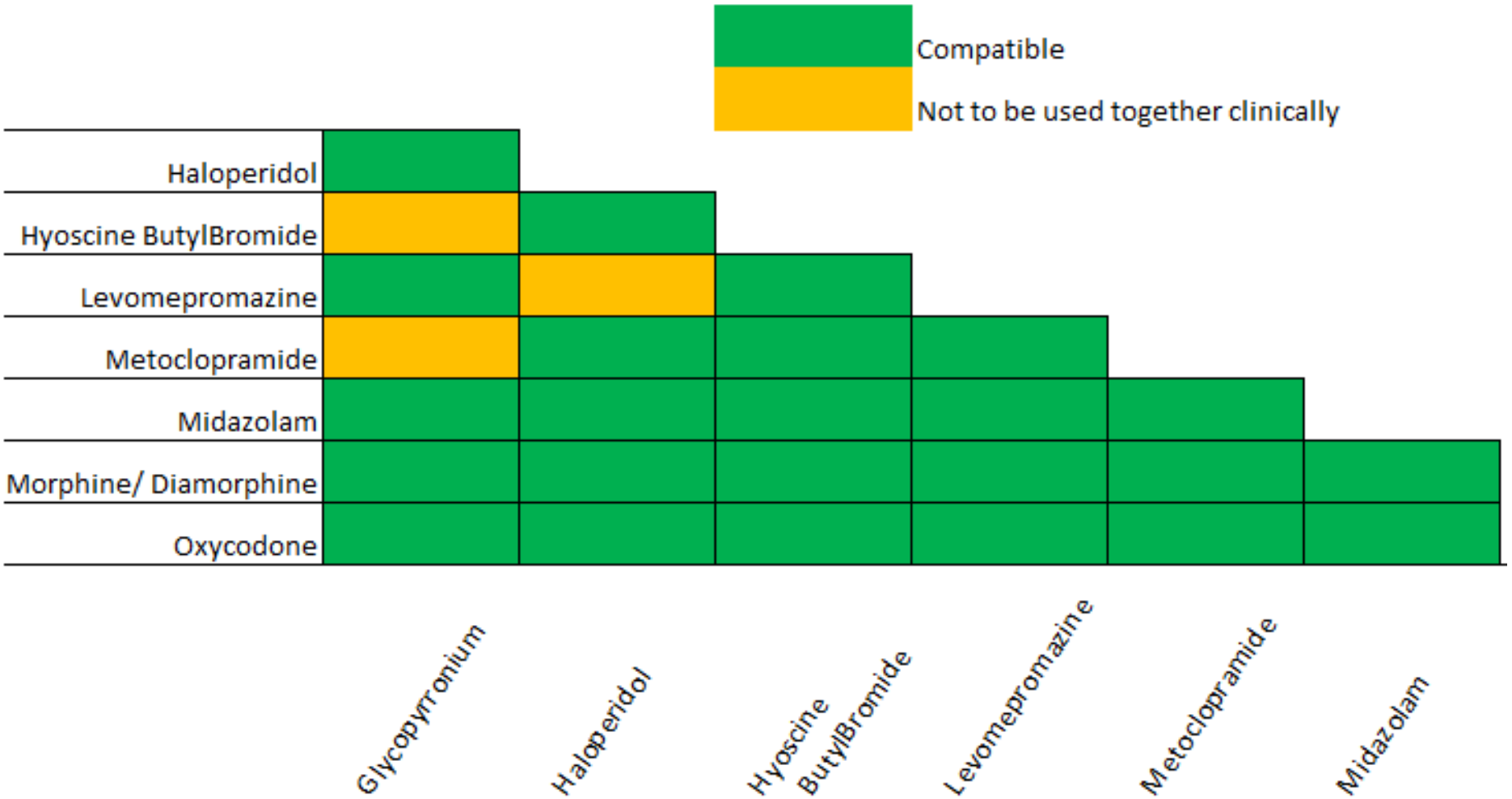
Attempt non-pharmacological management to make patient comfortable as possible such as open windows, sit up, give patient a fan etc.
If prescription is required ensure reason for administration is clear as this dose may differ from the pain relief breakthough dose. Patient use of opioids for breathlessness should NOT be taken into consideration if increasing background pain relief dose

Consider if patient's dyspnoea due to anxiety and prescribe as per agitation algorithm

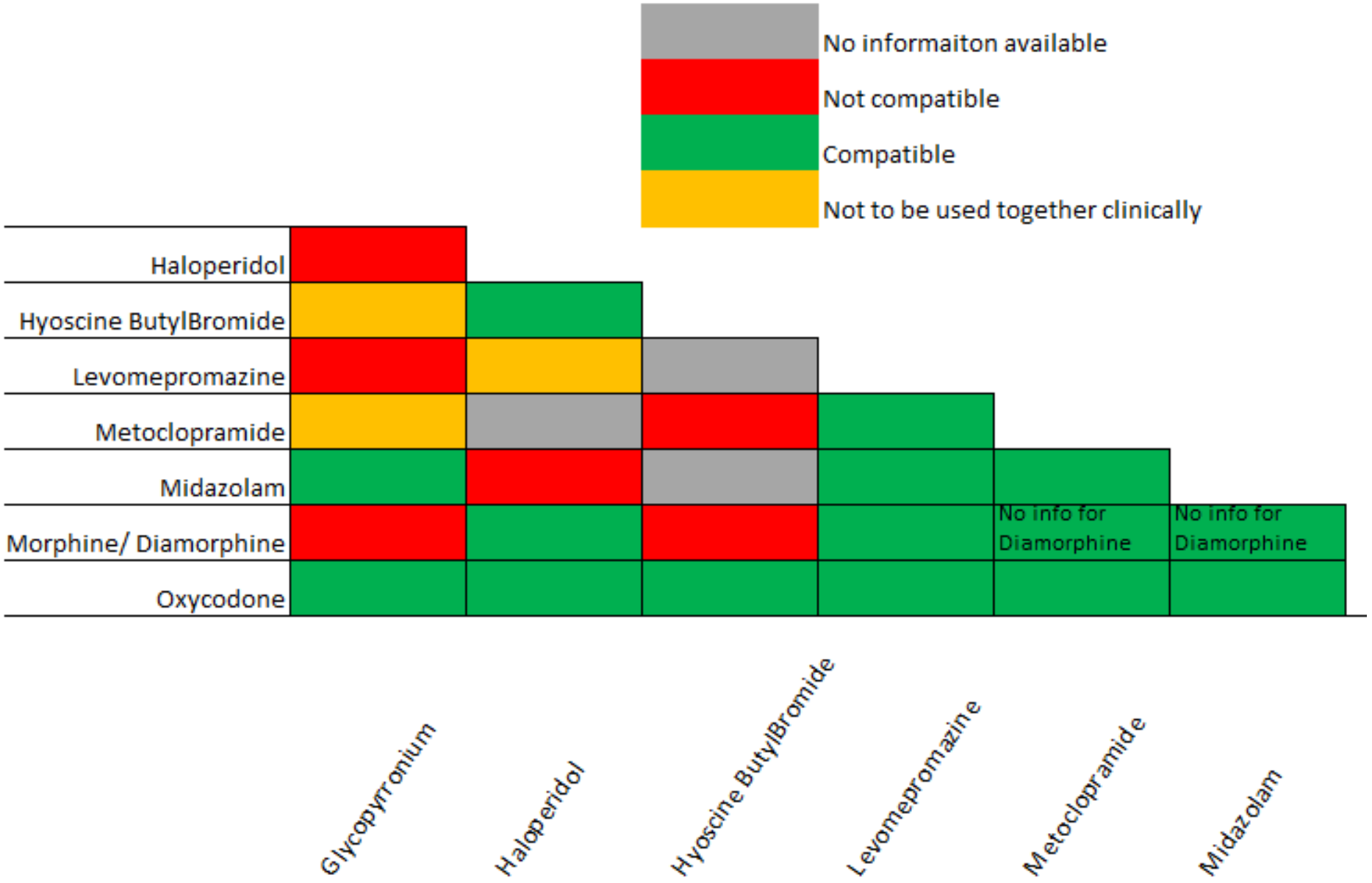


If symptoms persist contact the Palliative care team (contact details on front page)

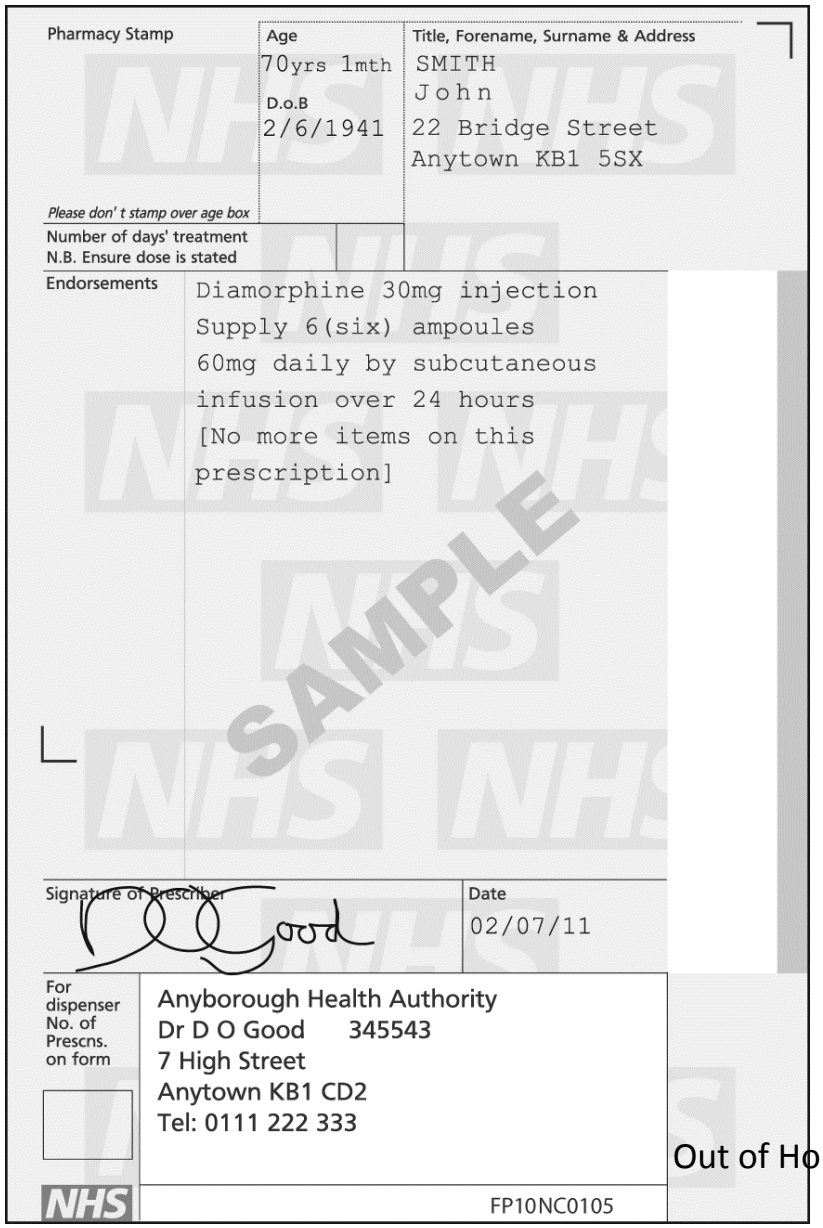
Two drug compatibility when diluted with WATER FOR INJECTION



Two drug compatibility when diluted with SODIUM CHLORIDE 0.9%



Guidance for Writing a Prescription for Controlled Drug Medication



If you have to organise a prescription for the supply of the medication there are certain legal requirements that must be on the prescription before a supply can be sought from a Pharmacy

Patient's details: Name, Address, Date of Birth

Medication Details: Drug name, form, strength.
Instructions for the patient (directions).
Total amount of tablets/ vials to be supplied in words and figures

<u>Examples</u>
Morphine Sulphate 10mg/ml amps
Supply 10 (ten)
Give 5mg (0.5ml) subcutaneously ONE hourly, if required

Morphine Sulphate 30mg/ml amps
Supply 15 (fifteen)
Give 30mg (1ml) by subcutaneous infusion over 24 hours

Prescriber details: Signature, date, name and address (GP surgery/ Out of Hours prescription pad)

Out of Hours Pharmacies across Warwickshire- correct as of March 2017

Asda Pharmacy
Brade Drive
Coventry, CV2 2PN
02476 625800
Monday-Saturday 8am-10pm
Sunday 10am-4pm

Boots Arena Shopping Centre
Classic Drive
Coventry, CV6 6AS
02476 685219
Monday to Saturday 9am- 12am
Sunday 11am-5pm

Stoney Stanton Pharmacy
631-633 Stoney Stanton Road
Coventry, CV6 5GA
02476 661758
Monday to Saturday 7:30am-11pm
Sunday 9am-5pm

Sainsburys Pharmacy
330 Fletchamstead Highway
Coventry, CV4 9BJ
02476 679736
Monday to Friday 7am-11pm
Saturday 7am-10pm
Sunday 10am-4pm

Boots Rugby
Junction 1 Retail Park
Rugby, CV21 1RW
01788 567385
Monday to Friday 9am-8pm
Saturday 9am-7pm
Sunday 10:30am-4:30pm

Pharmacy Republic
104 Edward St
Nuneaton, CV11 5RE
02476 371119
Monday-Friday 9am-11pm
Saturday- Sunday 9am-12am

No 8 Pharmacy
8 High Street
Bedworth, CV12 8NF
024 76 318511
Monday to Saturday 6am-9pm
Sunday 7am-5pm

Rosebird Centre Pharmacy
Shipston Road
Stratford-Upon-Avon, CV37 8LU
01789 206530
Monday-Friday 8am-8pm
Saturday 9am-5pm
Sunday 10am-4pm

Atherstone Pharmacy
87 Long Street
Atherstone, CV9 1BB
01827 712968
Monday-Saturday 6am-9pm
Sunday 7am-5pm

Asda Pharmacy
Chesterton Drive
Leamington, CV31 1YD
01926 311656
Monday to Friday 7am-11pm
Saturday 7am-10pm
Sunday 10am-4pm

Avon Pharmacy
Arden Street
Stratford-Upon-Avon, CV37 6HJ
01789 200920
Monday to Friday 7am- 11pm
Saturday 9am-7pm
Sunday 8am-6pm

Tesco Warwick
Emscote Road
Warwick, CV34 5QJ
0345 677 9701
Monday to Saturday 8am-8pm
Sunday 10am-4pm

References and useful websites

www.palliativedrugs.com	This website does require registration but it is free. It is based on the information contained in the Palliative Care Formulary. It includes details about unlicensed indications and routes as well as the mixing of multiple medications for administration via a continuous subcutaneous infusion and the diluent that should be used
www.wmpcg.co.uk	The West Midlands Palliative Care Guidance contains a lot of information about the symptoms a patient may experience at the end of life and how we manage those symptoms with different medications. It also has conversion charts for different opioids between oral and subcutaneous administration as well as patch conversions.
British National Formulary	Each organisation will have access to either paper copy or electronic version of a BNF. This has information for all medication licensed uses in Britain. This also contains conversion charts and guidance on how to complete a Controlled Drug prescription (FP10). It will not have information regarding many medications use subcutaneously as this is not licenced but widely regarded as common practice in the palliative care field.
Palliative Care Formulary	Each organisation will have access to either paper copy or electronic version of this reference. It has medications commonly used in Palliative Care in palliative care at recognised doses for palliative care- which may be higher or lower than licenced doses and very commonly for different indications and routes than licenced.
Department of Health	Guidance available regarding legalities of prescribing, dispensing and administering controlled drugs