SYMPTOM: PAIN

PATIENT UNABLE TO SWALLOW AND NOT ALREADY ON REGULAR STRONG OPIOIDS?
(e.g. no regular morphine, oxycodone or fentanyl)

If the patient is known to be intolerant to morphine or morphine not effective,
SEEK SPECIALIST ADVICE

Is the patient in pain?

YES

PRN S/C Morphine

- Give morphine 2.5 – 5mgs s/c 2 – 4 hourly PRN

If repeat doses required ***and*** morphine is effective review and consider continuous s/c morphine

Continuous S/C Morphine

Start a csci via a syringe pump over 24 hours

- Start at 10-20mg over 24 hours
- Calculate PRN 'breakthrough' dose by dividing total 24 hour dose of s/c morphine by 6
- Prescribe prn dose of morphine 2-4 hourly prn

NO

Pre-Emptive Prescribing

Prescribe morphine
2.5 - 5mgs s/c 2 - 4 hourly PRN
in case pain occurs

Review Pain At Each Visit

- Is morphine effective?
- If the patient needed more than 2 PRN doses in 24 hours consider if the 24 hour csci dose needs increasing
- Recalculate csci dose by adding PRN doses to amount in csci (Do not increase csci dose by more than 50%)
- If patient needs more that 4 PRN doses or morphine not effective **seek specialist advice**

KEY MESSAGES – PAIN

- Consider and eliminate reversible causes for pain (constipation, urinary retention, spiritual and psychological causes)
- Would a pain chart be of benefit?
- Use *'Stockport Pain and Symptom Control Guidelines'* Opioid conversion charts for extra support
- For specialist advice contact Palliative Care Team or St Ann's Helpline (see attached sheet)

If morphine requirement via csci is greater than 600mg over 24 hours, seek specialist advice

SYMPTOM: PAIN

PATIENT TAKING REGULAR ORAL MORPHINE BECOMES UNABLE TO SWALLOW?

If the patient is taking oral **oxycodone** seek specialist advice when commencing a continuous subcutaneous infusion

Is pain controlled on current dose?

NO

Commence CSCI via a Syringe Pump

- Convert the dose of oral morphine to the s/c equivalent (see key messages below)
- Consider increasing total 24 hour dose of s/c morphine by 30-50%.
- Give the increased total 24 hour dose of s/c morphine via syringe pump over 24 hours
- Calculate new breakthrough dose (see key messages below)

YES

Commence CSCI via a Syringe Pump

- Convert the dose of oral morphine to the s/c equivalent (see key messages below)
- Calculate breakthrough dose in case required (see key messages below)

Review Pain at Each Visit

- Is morphine effective?
- If the patient needed more that 2 PRN doses in 24 hours consider if the 24 hour csci dose needs increasing
- Recalculate csci dose by adding PRN doses to amount in csci (Do not increase by more than 50%)
- If patient needs more that 4 PRN doses or morphine not effective **seek specialist advice**

KEY MESSAGES - PRESCRIBING SUBCUTANEOUS MORPHINE

- To calculate the dose of s/c morphine, divide total dose of oral morphine by 2
- To calculate the breakthrough dose of morphine divide total 24 hour dose of s/c morphine by 6 and prescribe this dose 4 hourly s/c PRN (do not forget to include opioid patches in your calculation)
- Use *'Stockport Pain and Symptom Control Guideline'* opioid conversion charts for extra support

If morphine requirement via CSCI is greater than 600mg over 24 hours, seek specialist advice

SYMPTOM: PAIN

PATIENT USING FENTANYL PATCHES AND IS NOW UNABLE TO SWALLOW

IMPORTANT

CONTINUE TO USE AND CHANGE PATCH EVERY 72 HOURS AS PREVIOUSLY PRESCRIBED

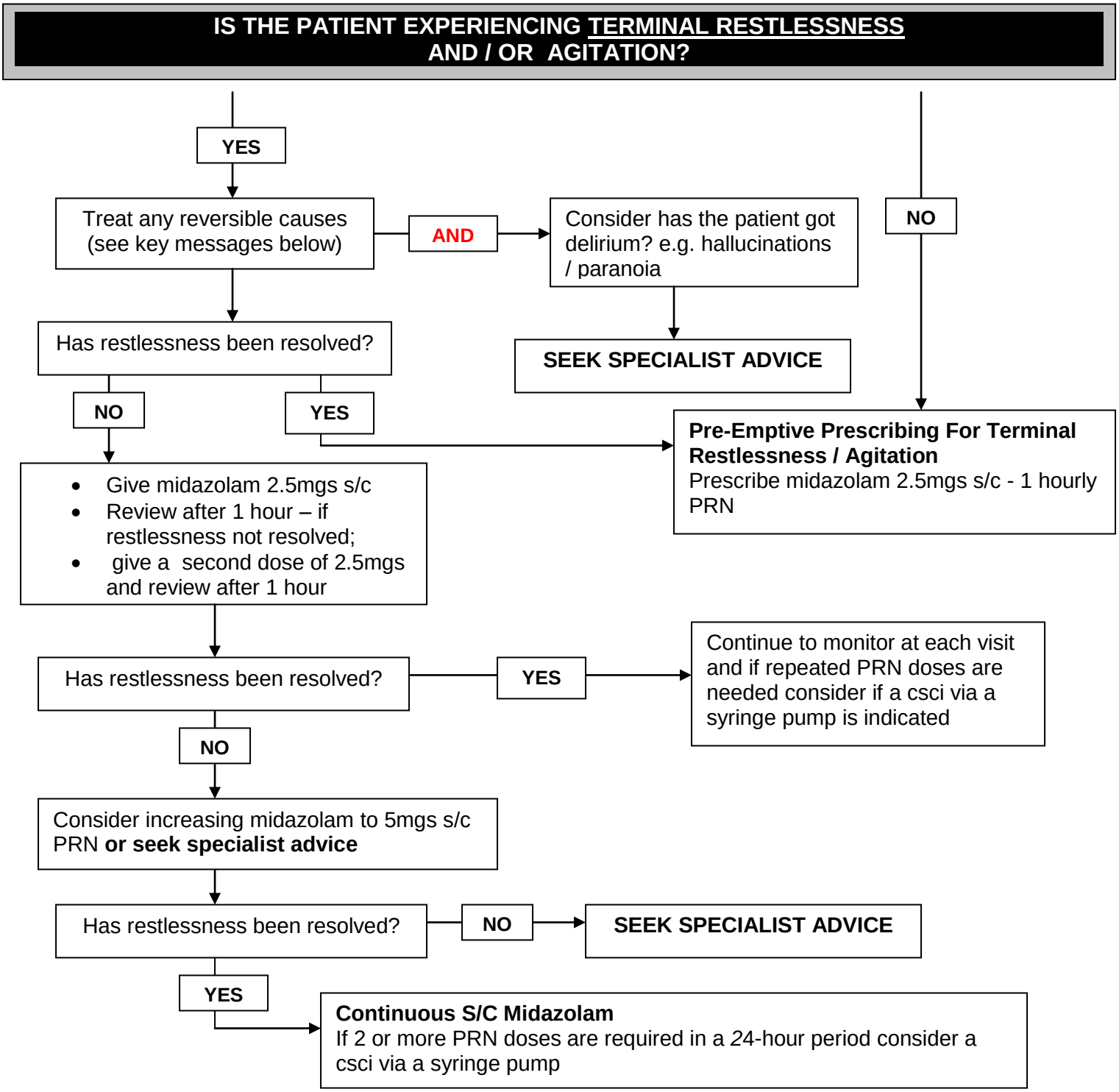
Pre-Emptive Prescribing

- Use S/C morphine for breakthrough pain
- Calculate or consult conversion chart as a guide (see below) for the PRN dose of s/c morphine that is relevant for the strength of patch
- Prescribe the dose 2 - 4 hourly PRN in case pain occurs

If pain not controlled or if needing more than 2 PRN doses are required over 24 hours seek specialist advice
(See attached sheet)

Fentanyl Transdermal (microgram/hour)	Subcutaneous morphine PRN dose (2 – 4 hourly PRN)
12	2.5mgs
25	5mgs
37	7.5mgs
50	10mgs
62	12.5mgs
75	15mgs
100	20mgs

(Stockport Palliative Care Pain and Symptom Control Guidelines – 4th Edition)



KEY MESSAGES – TERMINAL RESTLESSNESS AND AGITATION

- Document that reversible causes of agitation have been considered (pain, constipation, urinary retention, overheating, infection, nicotine withdrawal, high calcium levels)
- Review effectiveness of management at every visit, if **not** effective, **seek specialist advice**
- Consider adding any PRN doses given in previous 24 hours to syringe pump dose
- The PRN dose of midazolam should be the amount in the syringe pump divided by 6

ARE RESPIRATORY TRACT SECRETIONS PRESENT?

YES

Relieved by change of position?

YES → **Pre-Emptive Prescribing**
Glycopyrronium 200 micrograms s/c 4 hourly PRN

NO

- Give s/c bolus injection of glycopyrronium 200 micrograms
- Commence csci of glycopyrronium 600 micrograms over 24 hours via syringe pump

If respiratory tract secretions persist over the next 24-hours, increase dose to;

- Glycopyrronium 1200 micrograms s/c over 24 hours

If symptoms persist
SEEK SPECIALIST ADVICE

NO

KEY MESSAGES – TERMINAL RESTLESSNESS AND AGITATION

- Treatment must be commenced at **onset** of secretions. Medication will prevent new secretions being produced but will not remove secretions already present
- The BNF lists this antimuscarinic drug as glycopyrronium bromide. Ampoules are labeled as both glycopyrronium bromide and glycopyrrolate
- Terminal respiratory secretions may be most upsetting for family and those close to the patient. Discussion of these symptoms with them is important.
- Palliative treatment with antibiotics may be appropriate if they are likely to help reduce purulent secretions and increase the comfort of the patient

IS THE PATIENT BREATHLESS?

YES

General Measures

- Explanation
- Companionship
- Fan / open window
- Oxygen if hypoxic or symptomatically beneficial
- Nurse in upright position

Is there a reversible cause that can be managed given likely limited time?

YES

Treat the cause
e.g. nebulised bronchodilators for bronchospasm,
diuretics for heart failure,

If still symptomatic aim to relieve symptoms of breathlessness

NO

Pre-Emptive Prescribing of PRN Medication For People At Risk Of Breathlessness

- If **not currently** taking regular strong opioid prescribe morphine 2.5mgs s/c 4 hourly PRN in case patient becomes breathless
- If **currently** taking strong opioid ensure correct PRN dose is prescribed for pain and use this dose for breathlessness.
- If a dose is given for breathlessness follow the pathway for the patient who is breathless

If patient is unable to take morphine seek specialist advice

NO

Symptomatic Treatment To Relieve Distress Of Breathlessness

- If **not** currently taking regular strong opioid commence morphine 2.5mg s/c 4 hourly
- If 2 or more PRN doses are required assess need for syringe pump
- If **currently** taking strong opioid increase dose by 30% to cover the symptom of dyspnoea
- If the patient is also agitated add midazolam 2.5mgs s/c hourly PRN
- If 2 or more doses of midazolam are required consider adding to the syringe pump

If symptoms persist
SEEK SPECIALIST ADVICE

KEY MESSAGES – BREATHLESSNESS

- Treatments for reversible causes of breathlessness include; bronchodilators, diuretics, and antibiotics
- Simple measures such as a calm environment, a fan or open window can be just as effective as medication
- If the patient is taking regular opiates or benzodiazepines **seek specialist advice**

IS THE PATIENT EXPERIENCING NAUSEA AND / OR VOMITING?

YES

NO

Is the patient currently taking metoclopramide?

YES

NO

Is the metoclopramide effective?

YES

- Continue with equivalent metoclopramide via s/c route
- Oral to s/c conversion is 1:1
- Range between 30mgs and 40mgs over 24 hours
- If dose higher than 40mgs required **seek specialist advice**

NO

STOP the metoclopramide

Pre-Emptive Prescribing
Prescribe cyclizine 50mgs s/c 8 hourly PRN

- Give cyclizine 50mgs s/c bolus injection, 8 hourly PRN.
- If 2 or more doses needed in 24 hours commence a csci via a syringe pump

Continuous S/C Anti-Emetic

- Cyclizine 150mgs csci via syringe pump over 24 hours.

Review and if nausea and / or vomiting not resolved

Consider use of levomepromazine 6.25mgs prn whilst **seeking specialist advice**

KEY MESSAGES – NAUSEA AND VOMITING

- **Patients with complete bowel obstruction and nausea or vomiting should not receive metoclopromide**
- Metoclopramide and cyclizine should not be prescribed simultaneously
- Cyclizine should be diluted with water for injection to prevent crystallization
- Simple measures such as treating constipation and keeping the patient away from strong food smells may also help