



Bridgewater Community Healthcare

NHS Foundation Trust



Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3)

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For use by Community Nurses, Care Home Nurses, General Practitioners and Specialist Palliative Care Nurses

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This guidance is only to be used by appropriately trained staff. All staff must work within the limits of their competency.

If you have not been trained in this area please contact Wigan and Leigh Hospice on 01942 525566 at any time for specialist palliative care advice and support. This service is available 24 hours a day, 7 days a week including bank holidays.

1. Information regarding anticipatory prescribing for patients in the last days of life for Prescribers

- **1.1.** General Practitioners (GPs) and other community prescribers play an essential role in managing patients in the last days of life in the community setting.
- **1.2.** Recognising dying can be challenging and predicting when a patient will die once the diagnosis of dying has been made is notoriously difficult (i.e. this can range from hours, to a day, to a number of days or longer).
- **1.3.** For a number of years community prescribers have often been faced with a dilemma regarding so called "anticipatory prescribing" of medications (i.e. the pre-emptive prescribing of medications for subcutaneous (SC) use to alleviate patient symptoms that may be experienced in the terminal phase).
- 1.4. On one hand prescribers do not wish to see patients suffer, however prescribers also describe feeling pressured into prescribing medications by district nursing or care home staff and have expressed concerns that if the medications are prescribed then they may be administered regardless of clinical need.
- **1.5.** National Institute for Health and Care Excellence (NICE) guidance NG31 (Care of dying adults in the last days of life) supports the need to prescribe anticipatory medications "early" and also to take into account the time it may take to practically access these medications (i.e. some pharmacies may have to order supplies if they do not regularly stock the drugs).
- **1.6.** The NICE guidance encourages healthcare professionals to ensure an individualised approach is taken and that if medications are administered, the response to these is reviewed daily and the individual care plan adjusted accordingly.
- 1.7. In practical terms a dying patient will receive multiple visits from district nurses (or nurses within a care home), who will be reviewing the patient's symptoms, response to medications and will amend care plans. District Nurses / Nursing Home staff are responsible for the administration of medications and therefore need to provide the rationale for the use of medications and dose selection i.e. record in the individual care plan.
- 1.8. Medicines Management Leads from the Clinical Commissioning Group (CCG) and Bridgewater Community Healthcare NHS Foundation Trust, along with Clinicians from Palliative Care Services at Wrightington, Wigan and Leigh NHS Foundation Trust (WWL) and Wigan and Leigh Hospice support and encourage the use of anticipatory prescribing where appropriate and we hope that this advice will help resolve some of the potential conflicts that may occur.

- 1.9. Ideally the GP Out of Hours (OOH) service should not have to be involved in the vast majority of end of life cases; as with appropriate planning / prescribing the need for an "on call" GP to visit should be relatively rare (clearly there will be exceptions). There have been instances where patients / families have been left waiting for medications at weekends / overnight and also cases where admissions could have been avoided had medications been readily available.
- **1.10.** There will also be times when anticipatory prescribing may not be appropriate (or where modified approaches may be required, for example, cases where there would be concerns around the safe keeping of medications). Should anticipatory prescribing not be undertaken, prescribers should share the reasons why with the GP OOH service and their local district nurse and hospice specialist nurse teams to help these teams understand the reasoning and support the patient and their family.
- **1.11.** Community prescribers can contact Wigan and Leigh Hospice on 01942 525566 at any time for specialist palliative care advice and support. This service is available 24 hours a day, 7 days a week including bank holidays.

2. General guidance – prescribing

- **2.1.** When patients are identified as being palliative their regular medication should be reviewed with a view to reducing and stopping medications where appropriate.
- **2.2.** NICE guidance on multimorbidity highlights patients with limited life expectancy as benefitting from a 'multimorbidity' approach.
- **2.3.** Clinicians should take into account the possibility of lower overall benefit of continuing treatments that aim to offer prognostic benefit in those with reduced life expectancy.
- 2.4. Patients with limited life expectancy may wish to consider if they want to continue treatments recommended in guidance on single health conditions which may offer them limited overall benefit.
- **2.5.** Prescribers should discuss any changes to treatments that aim to offer prognostic benefit with the person, taking into account:
 - their views on the likely benefits and harms from individual treatments,
 - what is important to them in terms of personal goals, values and priorities.
- 2.6. When patients are identified as being in the last days of life the prescriber should ensure that suitable anticipatory medicines and routes of administration are prescribed as early as possible and review these medicines as the dying person's needs change.

- **2.7.** When deciding which anticipatory medicines to offer take into account:
 - the likelihood of specific symptoms occurring,
 - 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,
 - any risks of the medicine that could affect prescribing decisions, for example prescribing cyclizine to manage nausea and vomiting may exacerbate heart failure,
 - the place of care and the time it would take to obtain medicines.
- **2.8.** Decide on the most effective route for administering medicines in the last days of life tailored to the dying person's condition, their ability to swallow safely and their preferences.
- **2.9.** Where the oral route is not available, the subcutaneous (SC) route is preferred. Avoid giving intramuscular injections.
- **2.10.** When prescribing, specify the indications for use, the dosage of any medicines and the frequency of administration i.e. regular or when required (PRN).
- **2.11.** In the community setting it is usual for nurses to request a range of doses be prescribed. This supports them to manage the patient's symptoms in their own home where the nurse will not have ready access to a prescriber to alter prescriptions.
- **2.12.** Follow the ranges included in the algorithms within this guidance (see pages 15-22).
- **2.13.** Do not prescribe large dose ranges to avoid reviewing the patient.
- **2.14.** If prescribers need to go outside of this prescribing guidance the reasons for this should be documented within the patient's records.
- 2.15. If prescribing specific doses e.g. converting from oral to SC or increasing syringe pump or PRN doses, think about the practicalities for the nurse administering the medication. Doses should be rounded up or down to the nearest practical dose to administer.
- **2.16.** Medications should only be prescribed in small quantities to reduce waste medication.
- **2.17.** When issuing a prescription, take into account the next practical review and prescribe accordingly e.g. to cover a weekend period.

- **2.18.** Water for injections will be required as a diluent for syringe pumps. Occasionally sodium chloride 0.9% (NaCl 0.9%) is used as a diluent in syringe pumps; the specialist service will advise if this is necessary.
- **2.19.** As well as providing a prescription for the medication, nursing staff will also require an Authorisation to Administer Form (previously known as a DNR4 form) for both regular and PRN medication.
- **2.20.** Authorisation to Administer Forms must be renewed following any alterations to treatment. See pages 27-32 for copies of the Authorisation to Administer Forms in use and examples of how they should be completed.
- **2.21.** Seek specialist palliative care advice if the dying person's symptoms do not improve promptly with treatment or if there are undesirable side effects, such as unwanted sedation.
- **2.22.** Community prescribers can contact Wigan and Leigh Hospice on 01942 525566 at any time for specialist palliative care advice and support. This service is available 24 hours a day, 7 days a week including bank holidays.

3. Prescription requirements for controlled drugs used at the end of life

3.1. It may help family and friends to obtain end of life medications if each item is prescribed on a separate prescription form. This will allow the items to be dispensed from several pharmacies if necessary. See page 26 for example prescriptions.



Name of medication

It is good practice to use the full name e.g. morphine sulphate.

Strength

The strength of each item must be stated. To avoid ambiguity, where a prescription requests multiple strengths of a medicine, each strength should be prescribed separately.

Formulation

Abbreviations are acceptable e.g. amps. The size of the ampoule must also be stated. Most GP systems include this in the strength of the medicine e.g. morphine sulfate 10mg/1ml ampoule.

Dose

The dose must be clear and unambiguous – see table below for examples of what is and is not allowed.

Total Quantity

The total quantity must be written in both words and figures expressed as the number of dosage units e.g. Ten (10) ampoules OR 2 packs of 5 ampoules (two packs of five ampoules).

Doses that are legally acceptable	Doses that are NOT legally acceptable
One as directed	As directed
One PRN	PRN
Three ampoules to be given as directed	When required
2.5 – 5mg PRN	As per Authorisation to Administer Form
5-20mg over 24 hours via syringe pump	Via syringe pump as directed

4. Information regarding anticipatory prescribing for patients in the last days of life for Nurses

- **4.1.** Non-pharmacological treatments are an important part of high quality care at the end of life.
- **4.2.** Before initiating pharmacological treatments to manage symptoms nursing staff should ensure appropriate non-pharmacological methods of symptom management have been tried, for example, re-positioning to manage pain or using fans to minimise the impact of breathlessness.
- **4.3.** Although the GP (or other prescriber) will prescribe a number of anticipatory medicines, not all people in the last days of life experience all symptoms.
- **4.4.** Medication should only be administered if the symptom is experienced, any reversible causes have been treated and non-pharmacological methods alone are not managing the patient's symptoms.
- **4.5.** Nurses must follow the directions on the Authorisation to Administer Form. If the Authorisation to Administer Form has been written several weeks before the medication is required the nurse must ensure that it is still appropriate e.g. taking into account renal function or new medications. The nurse should liaise with the prescriber or specialist service if necessary. See pages 27-32 for copies of the Authorisation to Administer Forms in use and examples of how they should be completed.
- **4.6.** Before anticipatory medicines are administered, the nurse must review the dying person's individual symptoms and adjust the individualised care plan as necessary.
- **4.7.** Where a range of doses have been prescribed and the patient has not already been using the medication, start at the lowest dose and increase accordingly unless there is a good reason to use a higher dose this should be clearly documented in the patient's care plan.
- **4.8.** Nursing staff must monitor the patient for side effects following administration of medication and should be aware of the signs and symptoms of toxicity.
- **4.9.** If patients experience excessive side effects or show signs of toxicity seek specialist palliative care advice.

- **4.10.** If anticipatory medicines are administered:
 - Monitor for benefits and any side effects at least daily, and give feedback to the lead healthcare professional.
 - Adjust the individualised care plan and liaise with the prescriber to discuss requested changes to prescriptions as necessary.
 - Consider using a syringe pump to deliver medicines for continuous symptom control if more than 2 or 3 doses of any 'as required' medicines have been given within 24 hours. Remember – the patient may not necessarily need all the medication prescribed adding to the syringe pump, only the symptoms which have been identified must be treated.
 - Seek specialist palliative care advice if the dying person's symptoms do not improve promptly with treatment or if there are undesirable side effects, such as unwanted sedation.
- **4.11.** If a syringe pump is needed, all the first line medications included in this guidance should be diluted with water for injections. If other medications are recommended the person requesting the medication should advise on the diluent to be used.
- **4.12.** Medications should only be administered in line with symptoms and although the Authorisation to Administer Form may permit administration of several medicines only those which are required to manage the patient's symptoms should be administered. See pages 27-32 for copies of the Authorisation to Administer Forms in use and examples of how they should be completed.
- **4.13.** Generally no more than three medications should be mixed in a syringe pump, however at the end of life access can be a problem and it may be necessary to mix more drugs within a single pump. Mixing of medications in this manner is unlicensed but is supported by practice. The first line medications included in this guidance are all compatible to be mixed in a syringe pump.
- **4.14.** Check the syringe after set up for precipitation, cloudiness, particles or colour change.
- **4.15.** The syringe should be protected from direct light and heat and a new syringe should be prepared every 24 hours.
- **4.16.** Check the line, connection and cannula regularly and ensure the pump is running to time.
- **4.17.** Staff must take extra care in ensuring the correct dose of drug is prepared for administration. This is particularly important with opioid naïve patients and where there is more than one strength of the same drug available e.g. morphine, oxycodone and midazolam. There is often similar packaging of different strengths of these injectable products. Where possible a second check should take place.

- **4.18.** Nurses are reminded of the Nursing and Midwifery Code (NMC) 2015 to act within the limits of their competency and to refer to another suitably trained healthcare professional where necessary.
- **4.19.** All Community Nurses, including Care Home Nurses, can contact Wigan and Leigh Hospice on 01942 525566 at any time for specialist palliative care advice and support. This service is available 24 hours a day, 7 days a week including bank holidays.

5. Renal Impairment

- **5.1.** Many medications accumulate in renal impairment leading to an increased risk of toxicity.
- **5.2.** In end of life care it is important to be aware of the potential for renal failure without subjecting the patient to unnecessary invasive investigations.
- **5.3.** If renal function is not known when prescribing anticipatory medications do not check renal function. Follow the advice included in this guidance and reduce doses as necessary depending on the patient's response to treatment.
- **5.4.** If the patient has known renal impairment, it is recommended prescribers and nurses liaise with specialist palliative care services before prescribing any anticipatory medications. In some instances doses will be reduced or the dose interval increased but in other cases different medication to that included in this guidance may be used.
- **5.5.** If renal function is impaired or unknown, nursing staff should start medication using the lowest dose and monitor patients closely for excessive side effects.
- 5.6. Although many medications only require dose alterations at an estimated glomerular filtration rate (eGFR) ≤ 30ml/min, when considering the use of strong opioids in opioid naïve patients or patients currently taking weak opioids seek specialist advice if the patient has an eGFR ≤50ml/min.
- 5.7. For advice on managing patients with renal impairment, community prescribers and nurses can contact Wigan and Leigh Hospice on 01942 525566 at any time for specialist palliative care advice and support. This service is available 24 hours a day, 7 days a week including bank holidays.

6. **Opioid Toxicity**

- **6.1.** Features of opioid toxicity include drowsiness and respiratory depression (respiratory rate of less than 8 breaths per minute).
- **6.2.** However, patients who are reaching the end of their life are often drowsy due to the advanced stage of their illness and the incidence of life threatening respiratory depression is extremely rare.
- **6.3.** Additionally the respiratory rate of patients nearing death becomes altered, characterised by increasingly shallow breaths known as Cheyne-Stoke respiration.
- **6.4.** For advice community prescribers and nurses can contact Wigan and Leigh Hospice on 01942 525566 at any time for specialist palliative care advice and support. This service is available 24 hours a day, 7 days a week including bank holidays.

7. Authorisation to Administer Forms

- 7.1. When a Prescriber issues a prescription for medication to be used at the end of life, for either anticipatory use or current use, they will also issue an Authorisation to Administer Form (previously known as DNR4 form). See pages 27-32 for copies of the Authorisation to Administer Forms in use and examples of how they should be completed.
- **7.2.** It is very difficult for all the information that is contained on the Authorisation to Administer Form to be added to the FP10 prescription this is simply a practical issue with space on the prescription.
- **7.3.** Where possible, Prescribers will issue end of life medications with the instruction 'to be used as directed'. However, as some of the medications are controlled drugs, legal requirements mean that there must be some indication of dose. As the doses within this guidance are dose ranges and doses may be increased over time, the information a Pharmacist places on the label of the medication may not be the same as detailed on the Authorisation to Administer Form. As doses change the Prescriber will update the Authorisation to Administer Form without the need to issue new prescriptions.
- 7.4. This can mean that doses on the medication label and Authorisation to Administer Form may not match. This can also impact on the information on a Medication Administration Record (MAR) chart in a Care Home. The Authorisation to Administer Form must always be used when administering a medication to a patient not the labels on the dispensed product.

- **7.5.** Care Homes may be challenged by inspectors over discrepancies on MAR charts and Authorisation to Administer Forms. However, it would be completely impractical for a new FP10 to be generated (and a new MAR chart) every time a dose is changed in a palliative care situation. Staff should acknowledge that this is a necessary anomaly due to the complex nature of managing a patient in the last few days of life.
- **7.6.** Please use the most recent Authorisation to Administer Form as the accurate "instruction" for medications in a true end of life setting (last few days of life). Should doses/ranges need to be amended, then amendments or new Authorisation to Administer Forms will be issued (this depends on practical timing issues).

8. Palliative Care Pharmacies

- 8.1. The following Pharmacies have been commissioned to stock palliative care medications in the Wigan Borough. The range and quantity of drugs has been agreed between Wigan Borough CCG and Wigan and Leigh Hospice Palliative Care Team. Other Pharmacies will also carry some of these drugs but not necessarily the full selection.
- **8.2.** The Pharmacy should be contacted to confirm stock availability before an individual travels to the Pharmacy.
- **8.3.** In addition, supplies are available outside of these opening hours via the Out of Hours Pharmacy Service. This is accessed via the GP Out of Hours Service.

Pharmacy	Address	Tel no	Fax no	Opening hours
Asda	Asda Store	01942	01942	Mon: 8am - 11pm
Pharmacy	Atherleigh Way	266812	266811	Tues - Fri: 7am - 11pm
	Leigh			Sat: 7am - 10pm
	WN7 5RZ			Sun: 10am - 4pm
Asda	Asda Store	01942	01942	Mon - Fri: 8am - 10pm
Pharmacy	Soho Street	527319	527320	Sat: 8am - 8pm
	Wigan			Sun: 10:30am - 4:30pm
	WN5 0XA			
Asda	Asda Store	01942	01942	Mon: 8am - 11pm
Pharmacy	Edge Green Lane	407010	407011	Tues - Fri: 7am - 11pm
	Golborne			Sat: 7am - 10pm
	WA3 3SP			Sun: 10am - 4pm
Golborne	98 High Street	01942	01942	Mon - Sat: 7am - 10pm
Chemist	Golborne	714014	722374	Sun: 8am - 6pm
	Warrington			
	WA3 3DA			
Tesco	Tesco Store	0345	01942	Mon - Fri: 8am - 10pm
Pharmacy	Central Park Way	6779736	755249	Sat: 8am - 8pm
	Wigan			Sun: 10am - 4pm
	WN1 1XE			
Tesco	Tesco Store	0345	01942	Mon 8am - 10.30pm
Pharmacy	Spinning Jenny Way	6719347	502549	Tues - Fri: 6.30am - 10.30pm
	Leigh			Sat: 6.30am - 10pm
	WN7 4PE			Sun: 11am - 5pm
Elliott Street	177 Elliott Street	01942	01942	Mon - Sat: 8am - 10.30pm
Pharmacy	Tyldesley	870524	870524	Sun: 9.30am - 10.30pm
	Manchester			
	M29 8DR			
Shevington	Houghton Lane	01257	01257	Mon - Sat: 7am - 10pm
Pharmacy	Shevington	252753	252753	Sun: 10am - 8pm
	Wigan			
	WN6 8ET			

9. Palliative Care Formulary

9.1. Prescribers should take care to select the correct medication as there are a variety of strengths, dose forms and pack sizes available. Selecting items from the formulary and prescribing each item on a separate form may help families and friends to obtain the prescribed medication more easily.

Medication as it appears on most GP clinical systems
Alfentanil 5mg/1mL solution for injection ampoules
Alfentanil 1mg/2mL solution for injection ampoules
Cyclizine 50mg/1mL solution for injection ampoules
Dexamethasone 6.6mg/2mL solution for injection ampoules
Dexamethasone 2mg tablet
Durogesic [®] 12 micrograms/hour patch
Durogesic [®] 25 microgram/hour patch
Durogesic [®] 50microgram/hour patch
Glycopyrronium bromide 200micrograms/1mL solution for injection ampoules
Glycopyrronium bromide 600micrograms/3mL solution for injection ampoules
Haloperidol 5mg/1mL solution for injection ampoules
Hyoscine hydrobromide 400micrograms/1mL solution for injection ampoules
Levomepromazine 25mg/1mL solution for injection ampoules
Levomepromazine 25mg tablet
Lorazepam 1mg tablet (must be Genus brand)
Metoclopramide 10mg/2mL solution for injection ampoules
Midazolam 10mg/2mL solution for injection ampoules
Morphine sulfate 10mg/1mL solution for injection ampoules
Morphine sulfate 30mg/1mL solution for injection ampoules
Morphine sulfate 10mg/5mL oral solution
Oxycodone 10mg/1mL solution for injection ampoules
Oxycodone 20mg/2mL solution for injection ampoules
OxyContin [®] MR 10mg tablet
OxyContin [®] MR 20mg tablet
OxyNorm 5mg/5mL oral solution
Water for injections 2mL ampoules
Water for injections 5mL ampoules
Water for injections 10mL ampoules
Zomorph [®] MR 10mg capsule
Zomorph [®] MR 30mg capsule

10. Managing Pain – patient NOT currently taking strong opioids

(e.g. not taking morphine, oxycodone, fentanyl – see appropriate algorithm) Oral route unavailable (or likely to be unavailable) and renal function is known or assumed to be normal

Anticipatory prescribing for all patients:



Morphine 2.5-5mg SC PRN every 2-4 hours. Morphine 5-20mg SC over 24 hours in syringe pump.

Diluent - Water for Injection.

Issue prescription and complete Authorisation to Administer Form.

If the patient experiences pain the nurse must:

- 1. Identify and treat the cause if possible e.g. constipation, urinary retention, spiritual and psychological causes.
- 2. Use appropriate non-pharmacological methods.
- 3. If the patient is still in pain administer 2.5-5mg SC morphine in accordance with the patient's care plan. The lowest effective dose should always be used.

Do not initiate syringe pump at this stage.

- 4. Monitor for efficacy and side effects at least every 24 hours.
- 5. If effective, PRN morphine may be administered every 2-4 hours.

If the patient needs 2 or more PRN doses in 24 hours:

- 1. Nurse to consider initiating syringe pump.
- 2. If syringe pump is initiated the dose should be based on total PRN doses given over the previous 24 hours.

Example: patient has received 1x 2.5mg morphine SC and 2 x 5mg morphine SC PRN doses over 24 hours – commence syringe pump at a dose of morphine 12.5mg over 24 hours with additional PRN doses of morphine 2.5-5mg SC PRN every 2-4 hours

If PRN doses are required in addition to the syringe pump:

- 1. Nurse to review the syringe pump dose and increase based on 24 hourly dose and PRN doses within dose range prescribed.
- 2. No more than 6 PRN doses should be given in any 24 hour period without specialist advice.
- 3. Liaise with Prescriber to increase prescription dose if necessary.
- 4. Do not exceed the prescribed dose.

Altering the syringe pump dose:

- 1. When increasing the syringe pump dose the new dose should be the original 24 hour pump dose plus the PRN doses given over the previous 24 hours.
- 2. The syringe pump dose should not normally be increased by over 50% if the above calculation leads to an increase of over 50% in the 24 hourly dose seek specialist advice.
- 3. If the syringe pump dose is increased the PRN dose may also need to be increased.
- 4. The PRN dose should normally be 1/6th of the 24 hourly syringe pump dose.
- 5. Issue new Authorisation to Administer Form.

This protocol should be followed for patients not taking opioids or taking weak opioids only e.g. codeine, tramadol. For patients who are currently taking strong opioids see appropriate protocol - morphine page 16, oxycodone page 17, fentanyl page 18.

11. Managing Pain – patient taking oral morphine

Oral route unavailable and renal function is known or assumed to be normal (patients taking oxycodone or fentanyl, or not currently taking strong opioids use appropriate algorithm)

Key			
	Prescriber		Nurse

Convert oral morphine to equivalent SC morphine dose and calculate PRN dose:

- 1. Calculate the total 24 hour regular oral morphine dose.
- 2. Divide the total oral 24 hour morphine dose by 2 to calculate 24 hour SC morphine dose.
- 3. The PRN dose should normally be 1/6th of the 24 hourly SC dose (rounded up or down to the nearest conveniently measured dose).

Example: patient currently takes morphine MR 30mg bd = 60mg oral morphine per day.60÷2 = 30 Equivalent SC syringe pump dose = morphine 30mg SC over 24 hours PRN SC dose = 30÷6 = 5, morphine 5mg SC 2-4 hourly PRN

Prescribe medication, diluent (water for injections) and complete Authorisation to Administer Form.

Administer appropriate prescribed medication:

- 1. Identify and treat the cause if possible e.g. constipation, urinary retention, spiritual and psychological causes.
- 2. Use appropriate non-pharmacological methods.
- 3. If the patient is currently in pain administer PRN SC morphine.
- 4. Initiate syringe pump taking into consideration when the last oral dose was administered and the duration of effect of the previous dose. The syringe pump should usually be started when the next dose of oral modified release morphine would have been due. However, if pain is poorly controlled and breakthrough analgesia is required, then give a PRN dose and consider starting the pump earlier as it will take several hours to have an effect.
- 5. Monitor for efficacy and side effects at least every 24 hours.

If PRN doses are required in addition to the syringe pump:

- 1. No more than 6 PRN doses should be given in any 24 hour period without specialist advice.
- 2. Nurse to liaise with Prescriber to increase prescription dose if necessary.
- 3. Do not exceed prescribed dose.

Altering the syringe pump dose:

- 1. When increasing the syringe pump dose the new dose should be the original 24 hour pump dose plus the PRN doses given over the previous 24 hours.
- 2. The syringe pump dose should not normally be increased by over 50% if the above calculation leads to an increase of over 50% to the 24 hourly dose seek specialist advice.
- 3. If the syringe pump dose is increased the PRN dose may also need to be increased.
- 4. The PRN dose should normally be 1/6th of the 24 hourly syringe pump dose.
- 5. Issue new Authorisation to Administer Form.

Conversion Charts available on Pages 23 and 24

12. Managing Pain - patient taking oral oxycodone

Oral route unavailable and renal function is known or assumed to be normal (patients taking morphine or fentanyl, or not currently taking strong opioids use appropriate algorithm)

Кеу				
	Prescriber		Nurse	

Convert oral oxycodone to equivalent SC oxycodone dose and calculate PRN dose:

- 1. Calculate the total 24 hour regular oral oxycodone dose.
- Divide the total oral 24 hour oxycodone dose by 1.5 to calculate 24 hour SC oxycodone dose (the SC dose will be 2/3rd of the oral dose).
- 3. The PRN dose should normally be 1/6th of the 24 hourly SC dose (rounded up or down to the nearest conveniently measured dose).

Example: patient currently takes oxycodone MR 45mg bd = 90mg oral oxycodone per day. 90÷1.5=60. Equivalent SC syringe pump dose = oxycodone 60mg SC over 24 hours PRN SC dose 60÷6 = 10, oxycodone 10mg SC 2-4 hourly PRN

Prescribe medication, diluent (water for injection) and complete Authorisation to Administer Form.

Administer appropriate prescribed medication:

- 1. Identify and treat the cause if possible e.g. constipation, urinary retention, spiritual and psychological causes.
- 2. Use appropriate non-pharmacological methods.
- 3. If the patient is currently in pain administer PRN SC oxycodone.
- 4. Initiate syringe pump taking into consideration when the last oral dose was administered and the duration of effect of the previous dose. The syringe pump should usually be started when the next dose of oral modified release oxycodone would have been due. However, if pain is poorly controlled and breakthrough analgesia is required, then give a PRN dose and consider starting the pump earlier as it will take several hours to have an effect.
- 5. Monitor for efficacy and side effects at least every 24 hours.

If PRN doses are required in addition to the syringe pump:

- 1. No more than 6 PRN doses should be given in any 24 hour period without specialist advice.
- 2. Nurse to liaise with Prescriber to increase prescription dose if necessary.
- 3. Do not exceed prescribed dose.

Altering the syringe pump dose:

- 1. When increasing the syringe pump dose, the new dose should be the original 24 hour pump dose plus the PRN doses given over previous 24 hours.
- 2. The syringe pump dose should not normally be increased by over 50% if the above calculation leads to an increase of over 50% to the 24 hourly dose seek specialist advice.
- 3. If the syringe pump dose is increased the PRN dose may also need to be increased.
- 4. The PRN dose should normally be 1/6th of the 24 hourly syringe pump dose.
- 5. Issue new Authorisation to Administer Form.

Conversion Charts available on Pages 23 and 24

13. Managing Pain – patient using fentanyl patches

Oral route unavailable and renal function is known or assumed to be normal (patients taking morphine or oxycodone, or not currently taking strong opioids use appropriate algorithm)

Кеу			
	Prescriber		Nurse

All patients should remain on their fentanyl patch changed every 72 hours

Anticipatory prescribing for all patients:

1. Prescribe the appropriate PRN SC morphine dose from the tables below and diluent (water for injection).

2. Issue prescription and complete Authorisation to Administer Form.

Γ	Fentanyl patch	Morphine SC PRN	Fentanyl patch	Morphine SC PRN	Fentanyl patch	Morphine SC PRN
	(microgram/hour)	dose (mg)	(microgram/hour)	dose (mg)	(microgram/hour)	dose (mg)
	12	2.5	50	10	100	20
ſ	25	5	62	12.5	For patients on higher of on page 25 and consider	
ſ	37	7.5	75	15		vice

If the patient experiences pain the nurse must:

- 1. Identify and treat the cause if possible e.g. constipation, urinary retention, spiritual and psychological causes.
- 2. Use appropriate non-pharmacological methods.
- 3. Do NOT remove the fentanyl patch.
- 4. If the patient is still in pain administer PRN SC morphine.
- 5. Monitor for efficacy and side effects at least every 24 hours.
- 6. If effective, PRN morphine may be administered every 2-4 hours.

If the patient needs 2 or more PRN doses in 24 hours:

Nurse to liaise with Prescriber to initiate syringe pump in addition to the regular fentanyl patch.

1. Prescribe syringe pump:

If syringe pump is initiated the dose should be based on total PRN morphine doses given over the previous 24 hours.

Example: patient using fentanyl patch 25 microgram/hour patient has received 3 x 5mg morphine SC PRN doses over 24 hours Syringe pump dose = 3x5 = morphine 15mg SC over 24 hours

2. Review PRN dose:

If syringe pump initiated the PRN dose should normally be 1/6th of the 24 hourly syringe pump dose **plus** the PRN dose required for the fentanyl patch from the table above or on page 25.

Example: for fentanyl patch 25 microgram/hour PRN dose = morphine 5mg SC

for morphine 15mg SC over 24 hours via syringe pump PRN dose = 15÷6 = morphine 2.5mg SC Total PRN SC dose = 5+2.5 = morphine 7.5mg SC PRN every 2-4 hours

Continue fentanyl 25 patch

3. Issue new Authorisation to Administer Form.

If PRN doses are required in addition to the syringe pump and patch:

- 1. No more than 6 PRN doses should be given in any 24 hour period without specialist advice.
- 2. Nurse to liaise with Prescriber to increase prescription dose if necessary.
- 3. Do not exceed prescribed dose.

Altering the syringe pump dose:

- 1. When increasing the syringe pump dose, the new dose should be the original 24 hour pump dose plus the PRN doses given over previous 24 hours.
- 2. The syringe pump dose should not normally be increased by over 50% if the above calculation leads to an increase of over 50% to the 24 hourly dose seek specialist advice.
- 3. If the syringe pump dose is increased the PRN dose may also need to be increased as before.
- 4. Issue new Authorisation to Administer Form.

14. Managing Restlessness and Agitation

Oral route unavailable (or likely to be unavailable) and renal function is known or assumed to be normal

KeyMidazolam 2.5-5mg SC PRN every 2-4 hours.
Midazolam 5-30mg SC over 24 hours in syringe pump.PrescriberDiluent - Water for Injection.Issue prescription and complete Authorisation to

If the patient experiences restlessness or agitation the nurse must:

Administer Form.

- 1. Identify and treat the cause if possible e.g. urinary retention, constipation, nicotine withdrawal, pain, infection, overheating, psychological causes, renal failure, hyponatremia, hypercalcaemia.
- 2. Use appropriate non-pharmacological methods.
- 3. If the patient has delirium seek specialist advice.
- 4. If the patient is still restless or agitated administer 2.5-5mg SC midazolam in accordance with the patient's care plan. The lowest effective dose should always be used.
 Do not initiate suring number at this stage.

Do not initiate syringe pump at this stage.

- 5. Monitor for efficacy and side effects at least every 24 hours.
- 6. If effective, PRN midazolam may be administered every 2-4 hours.

If the patient needs 2 or more PRN doses in 24 hours:

- 1. Nurse to consider initiating syringe pump.
- 2. If syringe pump is initiated the dose should be based on total PRN doses given over the previous 24 hours.

Example: patient has received 3 x 2.5mg midazolam SC PRN doses over 24 hours – commence syringe pump at a dose of midazolam 7.5mg over 24 hours with additional PRN SC doses of midazolam 2.5-5mg SC PRN every 2-4 hours

If PRN doses are required in addition to the syringe pump:

- 1. Nurse to review the syringe pump dose and increase based on 24 hourly dose and PRN dose within dose range prescribed.
- 2. No more than 6 PRN doses should be given in any 24 hour period without specialist advice.
- 3. The total daily dose of midazolam including PRN doses should not exceed 30mg without specialist advice.
- 4. Liaise with Prescriber to increase prescription dose if necessary.
- 5. Do not exceed prescribed dose

Altering the syringe pump dose:

- 1. When increasing the syringe pump dose, the new dose should be the original 24 hour pump dose plus the PRN doses given over previous 24 hours.
- 2. The total daily dose of midazolam including PRN doses should not exceed 30mg without specialist advice.
- 3. If the syringe pump dose is increased the PRN dose may also need to be increased.
- 4. The PRN dose should normally be 1/6th of the 24 hourly syringe pump dose.
- 5. Issue new Authorisation to Administer Form.

15. Managing Respiratory Secretions

Oral route unavailable (or likely to be unavailable) and renal function is known or assumed to be normal

Key Prescriber Nurse

Anticipatory prescribing for all patients:

Glycopyrronium 200microgram SC PRN single dose. Glycopyrronium 600-1200microgram SC over 24 hours in syringe pump.

Diluent - Water for Injection.

Issue prescription and complete Authorisation to Administer Form.

If the patient experiences respiratory secretions the nurse must:

- 1. Identify and treat the cause if possible.
- 2. Use appropriate non-pharmacological methods, e.g. change of position.
- 3. If the patient is still experiencing respiratory secretions administer 200 microgram glycopyrronium SC in accordance with the patient's care plan **AND** initiate syringe pump at a dose of 600microgram glycopyrronium SC over 24 hours.
- 4. Treatment must be commenced at the onset of symptoms.
- 5. Medication will prevent new secretions being produced but will not remove secretions already present.
- 6. Monitor for efficacy and side effects at least every 24 hours.

If respiratory secretions persist over the next 24 hours:

- 1. Increase syringe pump to 1200 microgram glycopyrronium over 24 hours.
- 2. If symptoms persist seek specialist advice.
- 3. The total daily dose of glycopyrronium including PRN doses should not exceed 1200 microgram without specialist advice.

16. Managing Breathlessness

Oral route unavailable (or likely to be unavailable) and renal function is known or assumed to be normal

Key
Prescriber Nurse

Anticipatory prescribing – patients not using strong opioid for pain:

Morphine 2.5-5mg SC PRN every 2-4 hours. Morphine 5-20mg SC over 24 hours in syringe pump.

Diluent - Water for Injection.

Issue prescription and complete Authorisation to Administer Form.

Patients currently using strong opioid for pain:

Increase strong opioid dose by 33% to cover the symptom of breathlessness.

Doses should be rounded up or down to the nearest practical dose to administer.

Issue new Authorisation to Administer Form.

If the patient experiences breathlessness the nurse must:

- 1. Identify and treat the cause if possible e.g. nebulised bronchodilators for bronchospasm, diuretics for heart failure (if patient is agitated follow protocol for restlessness and agitation, see page 19).
- 2. Use appropriate non-pharmacological methods e.g. companionship, fan, nurse in upright position.
- 3. If the patient is still breathless administer 2.5-5mg SC morphine in accordance with the patient's care plan. The lowest effective dose should always be used. **Do not initiate syringe pump at this stage.**
- 4. Monitor for efficacy and side effects at least every 24 hours.
- 5. If effective, PRN morphine may be administered every 2-4 hours.

If the patient needs 2 or more PRN doses in 24 hours:

1. Nurse to consider initiating syringe pump.

2. If syringe pump is initiated the dose should be based on total PRN doses given over the previous 24 hours.

If PRN doses are required in addition to the syringe pump:

- 1. Nurse to review the syringe pump dose and increase based on 24 hourly dose and PRN dose within dose range prescribed.
- 2. No more than 6 PRN doses should be given in any 24 hour period without specialist advice.
- 3. Liaise with Prescriber to increase prescription dose if necessary.
- 4. Do not exceed prescribed dose.

Altering the syringe pump dose:

- 1. When increasing the syringe pump dose, the new dose should be the original 24 hour pump dose plus the PRN doses given over previous 24 hours.
- 2. The syringe pump dose should not normally be increased by over 50% if the above calculation leads to an increase of over 50% in the 24 hourly dose seek specialist advice.
- 3. If the syringe pump dose is increased the PRN dose may also need to be increased.
- 4. The PRN dose should normally be $1/6^{th}$ of the 24 hourly syringe pump dose.
- 5. Issue new Authorisation to Administer Form.



18. Dose Conversions

Drug	Conversion	Dose in 24 hours	Approximate oral
		(mg)	morphine equivalent in 24
			hours (mg)
Codeine	To obtain	240	24
Dihydrocodeine	equivalent oral	240	24
Tramadol	morphine dose	400	40
	divide by 10		

Table 1 - Dose conversions - weak opioids to oral morphine

Table 2 - Dose conversion buprenorphine transdermal to oral morphine

Buprenorphine patch strength	Approximate oral morphine equivalent in 24 hours (mg)	
5 microgram/hour	12	
10 microgram/hour	24	
20 microgram/hour	48	
35 microgram/hour	84	
52.5 microgram/hour	126	
70 microgram/hour	168	

These recommendations are based on an oral morphine: transdermal buprenorphine dose ratio of 100:1 derived from published data, which is in keeping with the buprenorphine manufacturer's dose ratio range of 75–115:1 (see SPC; it is an approximation, so be aware of individual variation).

 Table 3 - Dose conversions - strong opioids

Convert from	Convert to	Calculation
	SC morphine	Divide by 2
Oral morphine	Oral oxycodone	Divide by 2
	SC diamorphine	Divide by 3
	SC oxycodone	Divide by 1.5 (2/3 rd oral dose)
Oral oxycodone	SC morphine	Equivalent
	SC diamorphine	Divide by 1.5 (2/3 rd oral dose)
SC morphine	SC diamorphine	Divide by 1.5 (2/3 rd oral dose)
	SC oxycodone	Divide by 1.5 (2/3 rd oral dose)
SC diamorphine	SC oxycodone	Equivalent

		Morp	ohine		Diamor	phine	Oxycodone (mg)				
		(m	ng)		(m)	g)					
Route	Oral		S	SC		SC		Dral	SC		
	24 hours	4 hourly	Syringe	Syringe 4 hourly Syringe 4 hourly 24		24 4 hourly	Syringe Pump 4	4 hourly			
	total		Pump		Pump		hours		24 hours		
			24 hours		24 hours		total				
Dose	30	5	15	2.5	10	2.5	15	2.5	10	2.5	
	60	10	30	5	20	5	30	5	20	5	
	90	15	45	7.5	30	5	45	7.5	30	5	
	120	20	60	10	40	5	60	10	40	5	
	150	25	75	12.5	50	7.5	75	12.5	50	7.5	
	180	30	90	15	60	10	90	15	60	10	
	240	40	120	20	80	15	120	20	80	15	
	360	60	180	30	120	20	180	30	120	20	
	480	80	240	40	160	25	240	40	160	25	
	600	100	300	50	200	30	300	50	200	30	
	800	130	400	65	260	40	400	65	260	40	
	1000	160	500	80*	330	60	500	80	330	60	
	1200	200	600	100*	400	70	600	100	400	70	

Table 4 - Opioid Conversion Chart (note: - rounded to convenient doses)

This table does not indicate incremental steps. Dose increases are normally in 30-50% steps.

*SC volumes more than 2ml are uncomfortable; note: oxycodone injection is available as 10mg/ml or 50mg/ml; morphine injection as 10ml/ml or 30mg/ml; consider using alternative opioid or 2 injection sites per PRN dose if injection volume is more than 2ml.

19. Subcutaneous (SC) PRN doses for patients on fentanyl patches

Fentanyl patch (microgram/hour)	SC morphine 4 hourly PRN dose (mg)	SC diamorphine 4 hourly PRN dose (mg)	SC oxycodone 4 hourly PRN dose (mg)
12	2.5	1.25	1.25
25	5	2.5	2.5
37	7.5	5	5
50	10	5	5
62	12.5	7.5	7.5
75	15	10	10
100	20	12.5	12.5
125	25	15	15
150	30	20	20
175	35	25	25
200	40	25	25
225	45	30	30
250	50	35	35
275	55	35	35
300	60	40	40

(dose ratio oral morphine to transdermal fentanyl 100:1)

20. Prescription Examples

Endorsements	Morphine sulfate 10mg/1ml solution for injection ampoules CD 2.5-5mg s/c prn as required or via syringe pump as indicated Ten (10) ampoule
Endorsements	0xycodone 10mg/1ml solution for injection ampoules CD 2.5-5mg s/c prn or via syringe pump Ten (10) ampoule
Endorsements	Midazolam 10mg/2ml solution for injection ampoules CD 2.5-5mg s/c prn as required or via syringe pump as indicated Ten (10) ampoule
Endorsements	Glycopyrronium bromide 600 micrograms/3ml solution for injection ampoules 200mcg single dose then via syringe pump as indicated 10 ampoule
Endorsements	Levomepromazine 25mg/1ml solution for injection ampoules 5mg s/c 6 hourly or via syringe pump as indicated 10 ampoule
Endorsements	Water for injections 10ml ampoules use as directed 10 ampoule

21. Authorisation to Administer Form 1st line medication syringe pump



Wrightington, Wigan and Leigh NHS Foundation Trust

Wigan Borough Clinical Commissioning Group



AUTHORISATION TO ADMINISTER END OF LIFE SYMPTOM MANAGEMENT MEDICATIONS VIA SUBCUTANEOUS SYRINGE PUMP

Patient name:

NHS number: _____ General Date of birth: _____ Practitioner: _

Indication	Date and time of prescribing	Drug	Dos e over 24 hours	Pr	es criber	Stop Date and Time and By Whom (Refer to chart if represcribed)
				Print Name	Signature	
Pain and / or breathlessness	/				C	Date Time
wroddinooo nooo	Time			-	3	Name
Restlessness / Agitation		Midazolam			6	Date Time
- 99 9 06888070	Time		(maximum 30m g in 24 hours , including orn doses)			Name
Respiratory Secretions		Glycopyrronium	(maximum 1200 micrograms in 24 hours including pro doses)			Date Time Name
Nausea / Vomiting		Levomepromazine	(naximum 25mg in 24 hours		2	Date Time Name
Diluent		Water for injections	N/A			Date Time Name
Other medications	PLEASE PRESCR	RIBE ON SEPARATE /	AUTHORISATION TO ADMII	NISTER FORM		

Prescribing and completion of authorisation to administer forms for symptom management medicines via a syringe pump for end of life care should be in line with the Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3 - September 2017). Specialist advice should be sought when deviation from the Guidelines is required, including doses above the maximum recommended.

Chart of Date

FORM A - Version 1: September 2017 Review Date: September 2020

Chart..... of.....Date.....

22. Authorisation to Administer Form 1st line medication PRN



Wrightington, Wigan and Leigh

Wigan Borough Clinical Commissioning Group

NHS

General

Bridgewater Community Healthcare

AUTHORISATION TO ADMINISTER END OF LIFE SYMPTOM MANAGEMENT SUBCUTANEOUS BREAKTHROUGH (PRN) MEDICATIONS

Patient name:

NHS number: ______ Date of birth: ______

Date and time of prescribing	Drug	Dose	Frequency	Maximum number of doses in 24 hours	Prescriber		Stop Date and Time and By Whom (Refer to chart if represcribed)
(es) 55					Print Name	Signature	
/	8		5	6		n.	Date Time
Гіте							Name
	0) 2627-05 (2						Date Time.
Гime	Midazolam	(Maximum 30mg in 24		0			Name
<i>1</i>	Glycopyrronium	200 micrograms	Single dose	4			Date Time Name
	Levomepromazine	Meximum 25mg in 24		4			Date Time
Гіте		hours including pm)					Name
	Water for injections	N\A	NVA	NVA			Date Time
Гіте							Name
	ime	ime	Time Midazolam //20 Midazolam //20 Glycop yrronium Time 200 micrograms //20 Levomepromazine //20 Water for injections Time NVA	Time Image: Midazolam Midazolam Midazolam (Maximum 30mg in 24 hours including nm) //20 Glycop yrronium Time Color micrograms Single dose //20 Levomepromazine (Maximum 25mg in 24 hours including nm) //20 Water for injections		Image: Market with the second seco	Image: Market Print Waller Signature //20 Midazolam 6 6 //20 Midazolam (Maximum 30mg in 24 hours inducting em) 6 6 //20 Glycop yrronium 200 micro grams Single dose 1 1 //20 Levomepromazine (Maximum 25ing in 24 hours inducting em) 4 4 1 //20 Water for injections NVA NVA NVA NVA NVA

Other Medications | PLEASE PRESCRIBE ON SEPARATE MEDICATION AUTHORISATION FORM

Prescribing medications and completion of medication authorisation forms for breakthrough symptoms should be in line with the Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3 – September 2017). Specialist advice should be sought when deviation from the Guidelines is required, including doses above the maximum recommended.

Chart of Date

Practitioner:

Form C – Version 1: September 2017 Review Date: September 2020

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23. Authorisation to Administer Form blank syringe pump



Wrightington, Wigan and Leigh

Wigan Borough

Clinical Commissioning Group

Bridgewater Community Healthcare NHS Foundation Trust

AUTHORISATION TO ADMINISTER END OF LIFE SYMPTOM MANAGEMENT MEDICATIONS VIA SUBCUTANEOUS SYRINGE PUMP

 NHS number:
 ______ General

 Patient name:
 ______ Date of birth:
 Practitioner:

Indication	Date and time of prescribing	Drug Dose over 24 hours	Dose over 24 hours	Pr	escriber	Stop Date and Time and By Whom (Refer to chart if represcribed) Date Time
	or processing.		8	Print Name	Signature	
	Time		Maximum dose in 24 hours			Name
						Date Time
	Time		Maximum dose in 24 hours			Name
						Date Time
	Time		Maximum dose in 24 hours			Name
						Date Time
	Time		Maximum dose in 24 hours			Name
					24 	Date Time
	Time		Maximum dose in 24 hours			Name

Prescribing and completion of authorisation to administer forms for symptom management medicines via a syringe pump for end of life care should be in line with the Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3 - September 2017). Specialist advice should be sought when deviation from the Guidelines is required, including doses above the maximum recommended.

Chart of Date

FORM B - Version 1: September 2017 Review Date: September 2020

Chart..... of......Date.....

24. Authorisation to Administer Form blank PRN



Wrightington, Wigan and Leigh

NHS Foundation Trust

Wigan Borough Clinical Commissioning Group

General

Practitioner:



AUTHORISATION TO ADMINISTER END OF LIFE SYMPTOM MANAGEMENT SUBCUTANEOUS BREAKTHROUGH (PRN) MEDICATIONS

Patient name:

NHS number: ______ Date of birth:

Stop Date and Time and By Whom Maximum Indication Date and time of Drug Dose number of Prescriber (Refer to chart if Frequency prescribing doses in 24 represcribed) hours Print Name Sign ature Date..... Time..... Time.... Maximum dose in 24 Name..... hours.....) Date..... Time..... Maximum dose in 24 Time..... Name..... hours. Date..... Time..... (Maximum dose in 24 Name..... Time..... hours.... Date..... Time..... (Maximum dose in 24 Time..... Name..... hours Date..... Time..... (Maximum dose in 24 Time.... Name..... hours)

Prescribing medications and completion of medication authorisation forms for breakthrough symptoms should be in line with the Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3 - September 2017). Specialist advice should be sought when deviation from the Guidelines is required, including doses above the maximum recommended.

Chart of Date.....

Form D – Version 1: September 2017 Review Date: September 2020

Chart of Date

25. Example Completed Authorisation to Administer Form – Syringe pump



Prescribing and completion of authorisation to administer forms for symptom management medicines via a syringe pump for end of life care should be in line with the Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3 - September 2017). Specialist advice should be sought when deviation from the Guidelines is required, including doses above the maximum recommended.

Chart of Date

FORM A - Version 1: September 2017 Review Date: September 2020

Chart...... of...........Date.......

26. Example Completed Authorisation to Administer Form – PRN



Wrightington, Wigan and Leigh Wigan Borough

Clinical Commissioning Group

Bridgewater Community Healthcare

AUTHORISATION TO ADMINISTER END OF LIFE SYMPTOM MANAGEMENT SUBCUTANEOUS BREAKTHROUGH (PRN) MEDICATIONS

Patient name	Gladys Jones		NHS number: 452 675 8976 General Date of birth: 27/01/1945 Practitioner: Dr Brown						
Indication	Date and time of prescribing	Drug	Dos e	Frequency	Maximum number of doses in 24 hours	Pre	scriber	Stop Date and Time and By Whom (Refer to chart if represcribed)	
	Columbia de la constante esperante					Print Name	Signature		
Pain and / or Breathlessness	04/07./2017	Morphine	2.5-5Mg	2-4 hourly	6	DR BROWN	B Brown	Date Time Name	
Restlessness / Agitation	13.30 hours	Midazolam	2.5-5W.9 (Maximum 30mg in 24 hours including pm)	2-4 hourly	6	DR. BROWN	B Brown	Date Time Name	
Respiratory Secretions	<i>04/07</i> -/2017 13.30 hours	Glycopyrronium	200 micrograms	Single dose	-1	DR BROWN	B Brown	Date Time Name.	
Naus ea / Vo miting	04/07./2017 13.30 hours	Levomepromazine	Sing (Maximum 25mg in 24 hours including pm)	s hourly	4	DR. BROWN	B Brown	Date Time Name	
Diluent	04/07-/2017 13.30 hours	Water for injections	n/a	n/a	n/a	DR BROWN	B Brown	Date Time Name	

Other Medications PLEASE PRESCRIBE ON SEPARATE MEDICATION AUTHORISATION FORM

Prescribing medications and completion of medication authorisation forms for breakthrough symptoms should be in line with the Symptom Management Guidelines for Care of Adults in the Last Hours or Days of Life (Community Version 3 - September 2017). Specialist advice should be sought when deviation from the Guidelines is required, including doses above the maximum recommended.

Chart of Date

Form C – Version 1: September 2017 Review Date: September 2020

Wigan Borough Clinical Commissioning Group Wigan Life Centre • College Avenue • Wigan WN1 1NJ