Injectable medication and anticipatory prescribing for community palliative care patients
Guidance notes for health care professionals in Bristol

1. 'Just in Case' (JiC)/anticipatory medication for symptom control in the last days of life

For adult palliative care patients who are actively deteriorating and are in the last weeks or days of life it is good practice to provide anticipatory or 'Just in Case' (JiC) subcutaneous (SC) medication in the home, for symptom control in the last days of life. With the agreement of patient (and carer), JiC medication should be prescribed and authorised for a Community Registered Nurse e.g. District Nurse (DN) to administer if the patient is unable to take oral medication. Patients who deteriorate or develop uncontrolled symptoms will always require full clinical assessment to ensure there is appropriate treatment of any reversible factors and a clear management plan. Anticipatory prescribing should be tailored to the individual patient and circumstances, taking into account risks and benefits of prescribing in advance. Symptom control guidance plus a list of pharmacies stocking palliative care drugs is available at http://www.stpetershospice.org.uk/Clinical-Guidelines. Also refer to your local relevant policies.

Prescription and authorisation of JiC medication (see Community Palliative Care Prescribing Table)

- All 'Just in Case' (JiC) medication will need to be prescribed on form FP10 and authorised on the Community Palliative Care Drug Chart, to allow Registered Nurses in the community e.g. DN to administer subcutaneous/injectable PRN or syringe pump medication. (Includes prescribing table on back of chart)
- The chart can be completed by a General Practitioner or non-medical prescriber with the necessary competencies in palliative care. For patients being discharged into the community it can be completed by doctors and non-medical prescribers based in the Hospital Specialist Palliative Care Team or based at the local hospice and should accompany the patient home with the JiC medication. The GP and DN must be informed.

As required (PRN) subcutaneous medications (see prescribing table)

- For patients who have been assessed by an experienced clinician(s) as deteriorating and may be in the ***last few weeks of life*** consider prescribing PRN JiC medication.
- Prescribe PRN subcutaneous medications for each of the 5 common symptoms experienced at end of life: pain (opioid), dyspnoea (also use opioid), nausea/vomiting, agitation and secretions.
- Prescribe ***at least 10 doses of each medication***. Tailor amount prescribed to the individual patient. ***Example: Opioid (10 PRN doses), antiemetic, Midazolam 10mg/2ml, Hyoscine Butylbromide 20mg/ml.***
- DN should place medications in JiC box (North Somerset) with needles & syringes or offer JiC labels from leaflet.
- Consider PRN lorazepam tablets sublingually for anxiety (0.5-1mg 8 hourly).

Syringe pump medication for subcutaneous administration over 24 hours (see prescribing table)

- For patients who have been assessed by an experienced clinician (s), as approaching ***the last days of life*** with no reversible factors consider prescribing and authorising syringe pump drugs in the following circumstances:
  -For patients who are unable to swallow, convert current regular oral medications for symptom control to equivalent doses for subcutaneous use in a syringe pump. Assess the need for other medication for symptom control in the syringe pump. Authorise PRN medication for all the 5 common symptoms and consider authorising syringe pump drugs for these symptoms 'Just in Case' they are needed in the future.*
  -For patients who can still swallow but are likely to have difficulty with oral medication in the near future prescribe PRN subcutaneous medication for each of the 5 common symptoms and consider authorising syringe pump drugs in advance for these symptoms. Ensure this includes appropriate conversion of current oral medications.*
- Consider authorising an appropriate dose range for the syringe pump medications to allow for 1 or 2 dose increases by Community Nurse/DN. ***For opioid or midazolam a conservative range in the syringe pump allows for incorporation of 2 PRN doses (e.g. morphine 30-40mg) and the usual maximum range allows for incorporation of 4 PRN doses (e.g. morphine 30-50mg).*** Seek specialist advice if considering a wider range.
- Prescribe a diluent (usually water for injection) for use in syringe pump and place with syringes and giving sets in syringe pump box.
- Prescribe at least 3 days supply of 'Just in Case' medication for syringe pump and PRNs.

***Cautions when authorising and administering 'Just in Case' syringe pump drugs with ranges**

- Syringe pump drugs should usually only be authorised ***in advance for patients who are thought to be approaching the last days of life,*** with no reversible factors OR occasionally for symptom control in a palliative care patient who is at high risk of a specific symptom e.g. vomiting.
- Authorisation of syringe pump drugs in advance or authorisation of ranges is not appropriate in settings where nursing staff do not have adequate syringe pump training e.g. some nursing homes.
- For patients who have not previously had opioid or midazolam consider authorisation of these drugs as PRN only or as a low starting dose for a syringe pump 'Just in Case' with no range.
- DNs should usually start on the lowest dose in a syringe pump range, but if assessment of PRN requirements indicates the need for a higher dose (within the range) rationale for the chosen dose should be documented.
- If the patient has ongoing symptoms or a DN has made 2/3 changes to a syringe pump based on an authorised range consider a GP review and advice from a hospice health care professional.
  For all patients with JiC medication

- Ensure the carer can access a pharmacy with enough stock to dispense the prescription (see list stocking palliative care drugs on St Peters Hospice website).
- If available provide a leaflet on JiC medication and ensure patient and carer understand and agree to JiC medication and overall plan of care.
- If the patient consents, update the Electronic Palliative Care Co-ordination System (EPaCCS), and relevant professionals about present clinical situation, plan of care and medications prescribed.

2. Syringe pumps and subcutaneous medication for symptom control

- Syringe pumps may be used in the last days of life **or** for symptom control in Palliative Care patients who are **not** in the last days of life but need an alternative to oral medication. See Community Palliative Care Prescribing Table for prescribing advice or refer to more detailed guidance.*
- When initiating or increasing syringe pump medications the patient's symptoms and their requirements over the previous 24 hours, should be taken into account (PRN and regular doses). Oral opioid doses must be converted to subcutaneous equivalent. Rationale for choice of dose should be documented in patient's notes.

3. Prescribing for patients in the last days of life: guidance notes for specific circumstances*

Patients on fentanyl or buprenorphine patch

- Patches should be kept in place and changed as usual even in the last days of life.
- PRN subcutaneous analgesic (usually morphine) should be prescribed at a dose appropriate to the patch strength in case the patient is unable to swallow. If several PRN doses are needed, a syringe pump can be set up containing appropriate opioid in addition to the fentanyl or buprenorphine patch.

Patch type	Patch strength Micrograms/hr	Equivalent dose **oral** morphine/24 hours	Equivalent dose **subcutaneous** morphine / 24 hrs	PRN **subcutaneous** dose of morphine
Fentanyl	25 mcg/hr	~60-90mg/24hrs	30-45mg/24hrs	5-7.5mg 1hourly
Buprenorphine	20 mcg/hr	~30-50mg/24hrs	15-25mg/24hrs	2.5-5mg 1hourly

Steroids

- Continue steroids if considered essential for symptom control otherwise reduce gradually and discontinue.
- Dose of dexamethasone injection is the same as the oral dose. Dexamethasone may be given as a single daily SC injection, preferably in the morning, if dose is 8mg (2ml) or less.
- Alternatively dexamethasone can be administered via a syringe pump. It is incompatible with most other drugs so a second syringe pump is usually required.

Seizures/anticonvulsant drugs

- For patients on anticonvulsant drugs for the control of seizures who are unable to take oral medication (or those likely to become unable to take oral medication in the next few days): prescribe and authorise midazolam 20-30mg/24 hours SC via syringe pump for control of seizures (lower doses may be used in frailer patients).
- For those at risk of seizures prescribe Midazolam 10mg SC/IM or Buccal PRN for treatment of a seizure (lower doses may be used in frailer patients).

Patients at risk of major haemorrhage

- Consider authorising crisis medication e.g. Midazolam 10mg IM/Buccal, but seek advice from the local hospice team.

Patients with Parkinson's Disease

- Avoid use of anti-emetics such as haloperidol and metoclopramide. Subcutaneous cyclizine and low dose levomepromazine may be used with caution. Ondansetron is the subcutaneous anti-emetic that is least likely to worsen Parkinson's disease symptoms.
- Seek advice on managing rigidity from Parkinson's Disease Specialist Nurse.

Inoperable complete gastro-intestinal (GI) obstruction

- Seek specialist advice from the local hospice team.
- Hyoscine butylbromide can be used via a syringe pump for colic and to reduce volume of GI secretions.

Renal failure (see link to local guidelines)

- Seek specialist advice on use of opioids if eGFR<30ml/min or refer to local guidelines.
- http://www.nbt.nhs.uk/clinicians/services-referral/renal-kidney-gps/supportive-care-guidelines

4. 24 hour Advice Line for palliative care issues

St Peter's Hospice: 0117 915 9430. Weston Hospice: 01934 423912

**More detailed guidance available on https://www.stpetershospice.org/for-professionals/resources/clinical-guidelines*

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