Anticipatory prescribing (AP) of Just in Case (JiC) medication for symptom control in adult palliative care patients in last days of life: BNSSG quick reference guide.

For palliative care service users 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) medication in the home for the management of symptoms which commonly occur in the last days of life. Individuals 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 person and circumstances, taking into account risks and benefits of prescribing in advance. This is a quick reference guide, for more detail refer to full Standard Operating Procedure. For prescribing guidance refer to '*Community palliative care prescribing table: symptom control in last days of life for adults'* all available on St Peter's Hospice Guidelines page: https://www.stpetershospice.org/for-professionals/resources-for-professionals/clinical-guidelines/

Prescribing JiC medication and using Community Palliative Care Drug Chart to authorise administration

- Prescribe medication on an FP10 and authorise for administration on the chart. There are 2 versions of the chart in use:
    - 1. Electronic version (typed in EMIS, or rich text document completed by BrisDoc or in acute trusts) and printed on paper-often in black and white
    - 2. Colour card booklet version which is completed by hand (orders: bnssg.fasttrack@nhs.net)
- For both versions of the chart the prescriber and clinician administering medications must add their details to the front of the chart.
- The Anticipatory Drugs Protocol in GP EMIS will issue FP10s and produce a chart. It supports best practice with inbuilt alerts to aid individualised prescribing. The default set of medication and prepopulated chart should only be used for patients who are opioid naïve, have an eGFR>30 ml/min/ 1.73m^2 and where metoclopramide is appropriate.
- For all other patients it is important to select 'no' when asked if you want to issue the default set of medication and then the protocol will launch the chart with drop downs to select individualised drugs.
- For the electronic version ensure: each drug is 'signed' by typing professional number and date, chart is printed off (preferably double sided) and stapled into booklet version with administration pages aligned. A wet signature is not required.
- Sirona staff can print the chart from EMIS or if emailed by Brisdoc, to take into the home, but the prescriber must always communicate clearly what is needed by telephoning the Sirona Single Point of Access (SPA: 0300 125 6789).
- A GP can alter doses, drugs and ranges by editing the previous version in EMIS and using 'save as' to create a new document. They should record the version number on the front of the chart.
- A non-prescribing community clinician can discontinue any old charts by putting a line through the front with the words 'superseded' and the date.
- If urgent ensure the local pharmacy has enough stock to dispense the prescription or refer to the list of pharmacies which stock Palliative Care Medication on St Peter's Hospice Guidelines page.
- If a chart is being used for symptom control for a palliative care patient with a longer prognosis than weeks or days, tick the box 'non end of life symptom control' on front of the chart and do **not** authorise other syringe pump drugs for last days of life such as midazolam 'to start when needed'.

JiC medication in last weeks of life

- Prescribe and authorise as required (PRN) medication for each of the 5 symptoms commonly experienced at the end of life listed here with the 1st line drug: pain, dyspnoea (opioid for both), nausea/vomiting (individualised antiemetic), agitation (midazolam) and respiratory tract secretions/colic (Hyoscine butyl bromide).
- Convert their usual PO PRN opioid to appropriate SC dose. If an individual is on a regular antiemetic provide this as SC PRN if available. Otherwise choose antiemetic according to cause of nausea. (See prescribing table) Cyclizine is not used first line unless specifically indicated, e.g. in brain malignancies.
- Do not authorise medication for syringe pump in advance until approaching last days of life
- Provide **10 doses** of each drug if patient already requiring symptom control medication or **5 doses** for less complex patients, e.g. frail patients in a nursing home. >10 doses may be needed if very complex/symptomatic.
- Prescribe water for injection 10ml x 20 so it is available should a syringe pump be needed

JiC medication when approaching or in last days of life

- If an individual has lost their oral route convert any medication needed for symptom control to a syringe pump using the prescribing table and conversion factors and tick box 'start today' on chart
- Consider **appropriate ranges** (see cautions): For opioid or midazolam a conservative syringe pump range allows for incorporation of 2 PRN doses (e.g. morphine 30 - 40mg/24 hours, PRN 5mg SC) and the usual maximum syringe pump range allows for incorporation of 4 PRN doses (e.g. morphine 30 - 50mg/ 24 hours). ***Seek specialist advice if considering a wider range.***
- If likely to be needed in a few days, consider authorising syringe pump medications in advance with ranges for each of the 5 common symptoms and tick box 'to start when needed' BUT **see cautions**
- **Remember to prescribe and authorise diluent usually water for injection.**
- Prescribe enough medication for 7 days if starting a syringe pump or for at least 3 days if authorising pump to 'start when needed'.

Cautions regarding authorisation and administration of syringe pumps

- Authorising syringe pumps ***in advance to start when needed*** is usually only appropriate if an individual is ***approaching last days of life*** and their deterioration is not reversible OR occasionally for a patient who is at high risk of a specific symptom. e.g. vomiting in recurrent bowel obstruction.
- Some nursing home staff may not be trained in the use of ranges or pumps in advance, consider tighter ranges, no ranges or PRNS only after making a careful assessment.
- When selecting a dose from a range for syringe pump administration start on the lowest dose unless assessment of PRN requirements indicates the need for a higher dose. Rationale for the chosen dose should be documented.
- Consider titrating doses in syringe pump according to PRNS in last 24 hours but it is **not** always appropriate to incorporate all PRNS from previous 24 hours when titrating a syringe pump dose. Seek specialist advice when increasing total 24 hour dose by more than 50% of previous 24 hour dose in the syringe pump.
- If the individual has ongoing symptoms or a community clinician has made 2-3 changes to a syringe pump dose based on an authorised range consider a GP review and advice from a hospice health care professional before increasing the range.

Communication and advance care planning

- Individuals and their informal care givers must receive information about AP and consent to JiC medications. They should be offered an information leaflet.
- It is important to consider advance care planning, document decisions on a ReSPECT form and include information on AP in the electronic 'ReSPECT plus' record, where it will be available to health care services in all settings.

Anticipatory Prescribing in specific circumstances

Individuals on opioid patches

- The dose of opioid patch is not usually titrated in last days of life, as the slow absorption would result in delays achieving required increases. The patch is kept in place and changed as usual. Tick the box if on opioid patch on the PRN page of the chart and complete details.
- PRN subcutaneous analgesic (converting their usual oral PRN opioid) should be prescribed at a dose appropriate to the patch strength. If a person is approaching last days of life consider authorising a syringe pump to start when needed for the 5 common symptoms. The dose range for the opioid can be the calculated equivalent to approximately two-four SC PRN doses of opioid.

Patch type	Patch strength Micrograms/hr	Equivalent 24 hour dose oral morphine	Equivalent 24 hr dose subcutaneous morphine	PRN SC dose of morphine	Syringe pump 'to start when needed'
Fentanyl	25mcg/hr	60-90mg/24hrs	30-45mg/24hrs	5-7.5mg 1 hourly	Morphine 15-30mg/24 hrs
Buprenorphine	20mcg/hr	36-65mg/24hrs	~15-30mg/24hrs	2.5-5mg 1 hourly	Morphine 10-20mg/24 hrs

- If several PRN doses are needed, a syringe pump can be set up containing appropriate opioid, which can easily be titrated, alongside the patch. PRN doses must be adjusted to take into account patch and syringe pump opioid.

Steroids (Additional guidance is available on St Peter's Hospice Guidelines page.)

- Continue steroids if considered essential for symptom control otherwise consider discontinuation or gradual reduction.
- Dexamethasone 4mg orally is considered equivalent to dexamethasone 3.3mg injection
- Dexamethasone may be given as a single daily SC injection, preferably in the morning, if dose is 6.6mg or less (Ampoules are 3.3mg in 1ml or 6.6mg in 2ml as dexamethasone base). For higher doses give via a syringe pump. It is incompatible with most other drugs so a second syringe pump is usually required.

Seizures/anticonvulsant drugs *(seek specialist advice for those **not** in last days of life)*

- For individuals 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 (seek advice about using lower doses e.g. 10-15mg/24 hours in frailer/very low weight patients with good seizure control on monotherapy).
- Prescribe Midazolam 10mg SC/IM or Buccal PRN for treatment of a prolonged seizure >5 minutes, which can be repeated after 10 minutes in status epilepticus (seek advice about using lower doses in frailer/very low weight patients).
- Some antiemetics lower the seizure threshold. If patient has a primary brain tumour/history of seizures consider cyclizine as 1st line antiemetic and glycopyrronium as the anti secretory for anticipatory prescribing (hyoscine butyl bromide does not mix with cyclizine in a pump).

If at risk of major hemorrhage

- Consider authorising Midazolam 10mg IM/Buccal on the front of the chart as a once only medication.

Parkinson's Disease and other movement disorders

- Additional guidance is available on St Peter's Hospice Guidelines page
- Avoid use of anti-emetics such as haloperidol and metoclopramide. Due to risk of side effects consider Ondansetron 1st line, Cyclizine 2nd line and levomepromazine 3rd line for nausea and vomiting.
- Seek advice on managing rigidity from Parkinson's Disease Specialist Nurse if available or use guidance to convert oral medications to a patch using http://parkinsonscalculator.com/.

Inoperable complete gastro-intestinal obstruction

- Seek specialist advice from the local hospice team. Metoclopramide may be used in a syringe pump if there is incomplete obstruction and absence of colic.
- Avoid metoclopramide in complete obstruction or in the presence of colic. Hyoscine butyl bromide can be used via a syringe pump for colic and to reduce volume of GI secretions.

Adjustments for renal failure, liver impairment, severe frailty and/or low Body Mass Index

If there is a **clinically relevant risk of side effects** which outweighs the risk of suboptimal symptom control consider adjustments in the doses of some JiC medications as identified in the prescribing table in the following circumstances:

- For renal failure with < eGFR <30 ml/min/1.73m^2.
- When prescribing opioid if eGFR <30 ml/min/1.73m^2 see guidance on fentanyl and alfentanil available on St Peter's Hospice guidelines web page. It is important to weigh up the risk of side effects from more commonly used opioids against the risk of prescribing drugs such as fentanyl/alfentanil where community staff are less familiar with their use and there is more risk of administration errors. Seek specialist advice from hospice teams.
- For those with severe liver impairment, classified as Charles-Pugh score of C (e.g. advanced cirrhosis/liver failure).
- It is not usually necessary to adjust the JiC opioid in liver impairment but seek specialist advice if there are concerns about side effects.
- For those with severe frailty and/or low BMI-use clinical judgement regarding the need for dose adjustment.