

Anticipatory Prescribing in Palliative Care

Access to Medication in the Community

One of the factors that helps ensure good care for patients dying at home is the availability of adequate medication, especially out-of-hours (OOH).

This information sheet looks at two methods of achieving this:

- **Just In Case** prescribing, and;
- Individualised “**Targeted Anticipatory Prescribing**”.

This information is intended for GPs looking after patients in their own homes or nursing home.

Background

When a patient with a terminal illness deteriorates acutely at home, with symptoms like pain or breathlessness, it may be their wish to remain at home and be treated palliatively.

The delay of waiting to see an out-of-hours doctor, and then to find a chemist open which stocks the drugs prescribed can be extremely distressing for both patient and their family.

Two methods of anticipating these situations are the **Just In Case scheme**, and a more individualised **anticipatory prescribing**. Both aim to optimize end-of-life at home, and may help to prevent unnecessary admissions to hospital.

Suitable patients may be identified at regular palliative care meetings in the GP practice, or by the specialist palliative care teams.

Anticipatory prescribing can be considered as part of Advance Care Planning for the patient.

Key changes to JIC Service

- The box has been replaced with single use, disposable sealed orange plastic bags.
- The standard list of injectable drugs for common symptoms, such as pain, breathlessness, anxiety or agitation, includes alternatives in case of specific patient need/ manufacturing issues.
- Prescribers do not need to complete pharmacy notification forms at the time of prescribing.
- Audit forms do not need to be completed when administering contents of pack.
- **GP does not need to prescribe a drug chart** - a blank chart will be provided in pack, to be completed when patient needs the medications.

Just in Case prescribing

The Just in Case (JIC) service is an All-Wales scheme which has been approved by the Welsh Assembly Government. It was implemented in 2014 as a JIC box, and reviewed nationally in 2017, following feedback on the service model.

If a patient has a terminal illness with a **prognosis of a few months**, consider prescribing a JIC pack.

The JIC pack provides an easily identifiable source of medication, which facilitates the effective management of **unexpected** breakthrough symptoms by healthcare professionals, *until* the patient's needs can be fully reviewed and tailored medication provided.

The pack contains enough drugs to achieve initial symptom control or to last overnight **only**. Additional drugs may be needed if a syringe driver is required, or to cover a weekend. In cases where patients are already on significant doses of opioids, or already on injectable medications, and the circumstances of their likely deterioration can be anticipated, a more targeted approach to prescribing is appropriate.

Choice of drugs

The four commonest PRN drugs used in the last days of life, are:

- Diamorphine (or alternative);
- Cyclizine;
- Hyoscine hydrobromide;
- Midazolam.

Haloperidol or levomepromazine are used less frequently for management of nausea or agitation.

Just in Case Prescribing

When to prescribe a JIC

1. If a patient has a palliative diagnosis, but *not* yet entered the Care Decisions for the Last Days of Life Pathway.
2. Patient is *not* currently requiring regular injectable management of symptoms.
3. Estimated prognosis is *at least weeks to months*, i.e. it is not anticipated that the patient will deteriorate over the next few days.

The JIC pack is NOT for patients who need an immediate supply of medication.

There may be a **3 day delay** in dispensing a JIC, therefore should not be used in urgent cases. Instead, use *Targeted Anticipatory Prescribing*.

How to prescribe a JIC

- A WP10 for the contents should be produced in the usual way; the exact drugs & quantities must be prescribed.
- **CD prescription requirements apply to the diamorphine & midazolam**, including dosage instructions.
- Quantity *and* dose must be specified on prescription, for every medication. This is to prevent medication errors if the patient were to be admitted, and their prescription transcribed onto hospital drug chart.

For example: *“Diamorphine 2.5mg SC to be given as charted, please supply 5 (five) x10mg amps”.*

- Include the direction *“Please supply as a Just In Case Pack”.*
- Provide patient with JIC Information leaflet.
- Prescription must contain 5 items, one for:
 1. Pain;
 2. Nausea/vomiting;
 3. Respiratory symptoms;
 4. Anxiety, plus;
 5. **Water for injection**

Example 1

You are looking after a patient with bowel cancer. She is receiving palliative chemotherapy but her condition is slowly deteriorating. You feel that her prognosis is likely to be only a few months.

On discussion with her, it is clear that she is frightened of being in pain, (which she does not currently have) and that quality of life is her priority. She wishes to remain at home “at all costs”, and is realistic about her prognosis.

You should consider prescribing the Just in Case pack.

Example 2

A patient with NYHA Stage IV heart failure has been told by his cardiologist that there is little more they can do to help his condition. You estimate his prognosis to be less than 6 months, but probably more than a few weeks. He has said that he does not want to go into hospital unless it is absolutely necessary.

During his last admission to hospital he had a chest infection treated with antibiotics, and the patient would not rule out further active treatment if it is appropriate.

You consider that it may be possible this patient will deteriorate, and this could happen fairly acutely OOH in circumstances where palliative control of his symptoms at home would be appropriate.

You should consider prescribing a Just in Case pack, which would reduce delay in accessing injectable drugs for pain or breathlessness.

Always prescribe the lowest dose on WP10 when prescribing the JIC medications.

The alternative options are available if there is a specific patient need (e.g. allergy), or a manufacturing issue.

SYMPTOM	Standard JIC	Alternative 1	Alternative 2
1. Pain	Diamorphine 10mg (x5)	Morphine 10mg (x5)	Oxycodone 10mg/ml (x5)
2. Nausea/Vomiting	Cyclizine 50mg/ml (x5)	Haloperidol 5mg/ml (x5)	Levomepromazine 25mg/ml (x5)
3. Respiratory	Hyoscine Hydrobromide 400mcg/ml (x5)	Glycopyrronium 200mcg/ml (x5)	
4. Anxiety	Midazolam 10mg/2ml (x5)		
5. Water for injection	Water for injection 10ml (x10)		

Targeted Anticipatory Prescribing

When to use Anticipatory Prescribing

If a patient is considered to be in the **last few weeks of life**, or is being cared for using the **Care Decisions for the Last days of Life pathway**, you should ensure that there is PRN medication available in the home to control pain, breathlessness, vomiting, agitation and death rattle.

You should also consider any other predictable complications specific to the patient e.g. seizures or colic.

Anticipatory medications for palliative care will also now be dispensed into orange bags, making drugs easier to identify for District Nurses and Paramedics.

How to prescribe anticipatory medications

- Exact drugs, dose and quantity must be prescribed.
- Prescribe the medications on a drug chart on the PRN section, so that District Nurses can administer when needed without delay.
- Please include the direction "*Prescribed in Anticipation*".
- The provision and location of medications for targeted anticipatory prescribing OR a JIC pack should be communicated with the District Nurses, the Clinical Nurse Specialist for the patient, and the OOH GP team.

Diamorphine Alternatives

Morphine (10mg/mL and 30mg/mL ampoules) or oxycodone (10mg/1mL, 20mg/2mL or 50mg/1mL) are used as alternatives to diamorphine in some circumstances, and will mix with other drugs in a syringe driver similar to diamorphine.

Water for Injection 10mL x 10 ampoules should be added to every prescription

Equivalent Doses

Orally (24h dose)

Morphine 30mg = Oxycodone 15mg

By Injection (24h dose)

Diamorphine 10mg = Oxycodone 10mg = Morphine 15mg

Example 3

A patient with metastatic lung cancer is deteriorating rapidly and he is keen to stay at home. He is taking M.S.T 30mg b.d. and cyclizine 50mg t.d.s. You estimate his prognosis is less than a few weeks. He is still managing to take oral medication at present.

As it is likely that he will need a syringe driver in the near future, and you can anticipate his likely needs, you should consider prescribing drugs needed for a syringe driver, as well as PRN drugs for end-of-life care (*targeted anticipatory prescribing*).

Suitable drugs to prescribe for a syringe driver would be based on his current needs:

- Diamorphine 20mg/24hr, and;
- Cyclizine 150mg/24hr.

Suitable PRN medication would be:

- Diamorphine 5mg SC PRN 4-hourly (based on 24hr dose) - for pain or breathlessness;
- Cyclizine 50mg SC PRN 8-hourly - for nausea & vomiting;
- Midazolam 2.5 - 5mg SC PRN 4-hourly - for anxiety / agitation;
- Hyoscine hydrobromide SC PRN 0.4mg 4-hourly - for increased respiratory secretions ('death rattle').

To determine the *quantities* (number of ampoules) to prescribe, look at the tables which follow, and refer to the regular daily dose in the left column. Unless there is a Bank Holiday looming, prescribe for 3-days to cover a weekend:

- Diamorphine (daily dose =20mg) 10mg ampoules x15;
- Cyclizine (daily dose=150mg) x15 ampoules (50mg/1mL);
- Midazolam (daily dose=nil) x10 ampoules (10mg/2mL);
- Hyoscine hydrobromide (daily dose=nil) x20 ampoules (0.4mg/1mL).

These quantities are sufficient to provide for both a syringe driver and PRN doses for 3 days.

Opioid Patches

For patients on opioid patches, a prescription should include diamorphine to cover the need for PRN or increase in analgesia.

First, calculate the equivalent diamorphine daily dose of the opioid patch (e.g. fentanyl 25µg/h patch → diamorphine 30mg/24h).

To decide how many ampoules to prescribe, look in the table at the row corresponding to approximately $\frac{1}{2}$ - $\frac{2}{3}$ of this dose i.e. 20mg/24h.

The following tables give suggested quantities to prescribe, based on the patient's requirements

How Quantities Are Calculated

The tables show the approximate number of ampoules required:

- allowing for an average use of 2 x PRN doses/day of each drug;
- allowing for 2 increments in dose of the opioid analgesic over the days;
- midazolam only comes in 10 ampoules/box; the rest are rounded up to the nearest 5 ampoules.

Diamorphine (10mg, 30mg, 100mg amps.)

Daily dose	SC PRN	3 days	4 days	5 days
-	2.5-5mg PRN 4hrly	15 x 10mg	15 x 10mg	15 x 10mg
10mg/24h	2.5-5mg PRN 4hrly	15 x 10mg	20 x 10mg	20 x 10mg
20mg/24h	5mg PRN 4hrly	15 x 10mg	20 x 10mg	25 x 10mg
30mg/24h	5mg PRN 4hrly	5 x 30mg 10 x 10mg	5 x 30mg 15 x 10mg	10 x 30mg 15 x 10mg
40mg/24h	5-10mg PRN 4hrly	5 x 30mg 15 x 10mg	10 x 30mg 15 x 10mg	10 x 30mg 20 x 10mg
50mg/24h	5-10mg PRN 4hrly	10 x 30mg 10 x 10mg	10 x 30mg 15 x 10mg	15 x 30mg 20 x 10mg
60mg/24h	10mg PRN 4hrly	10 x 30mg 10 x 10mg	10 x 30mg 15 x 10mg	15 x 30mg 20 x 10mg

Morphine (10mg in 1mL, 30mg in 1mL amps.)

Daily dose	SC PRN	3 days	4 days	5 days
-	5mg PRN 4hrly	15 x 10mg	20 x 10mg	25 x 10mg
20mg/24h	5mg PRN 4hrly	15 x 10mg	20 x 10mg	25 x 10mg
30mg/24h	5mg PRN 4hrly	5 x 30mg 10 x 10mg	5 x 30mg 15 x 10mg	10 x 30mg 15 x 10mg
40mg/24h	5-10mg PRN 4hrly	5 x 30mg 15 x 10mg	10 x 30mg 15 x 10mg	10 x 30mg 20 x 10mg
60mg/24h	10mg PRN 4hrly	10 x 30mg 10 x 10mg	10 x 30mg 15 x 10mg	15 x 30mg 20 x 10mg
90mg/24h	15mg PRN 4hrly	10 x 30mg 15 x 10mg	15 x 30mg 20 x 10mg	20 x 30mg 25 x 10mg

Oxycodone (10mg in 1mL, 20mg in 2mL, 50mg in 1mL)

Daily dose	SC PRN	3 days	4 days	5 days
-	2.5-5mg PRN 4hrly	15 x 10mg	15 x 10mg	15 x 10mg
10mg/24h	2.5-5mg PRN 4hrly	15 x 10mg	20 x 10mg	25 x 10mg
20mg/24h	5mg PRN 4hrly	15 x 10mg	25 x 10mg	30 x 10mg
30mg/24h	5mg PRN 4hrly	20 x 10mg	25 x 10mg	10 x 20mg 15 x 10mg
40mg/24h	5-10mg PRN 4hrly	20 x 10mg	10 x 20mg 15 x 10mg	15 x 20mg 15 x 10mg
50mg/24h	5-10mg PRN 4hrly	5 x 50mg 10 x 10mg	5 x 50mg 15 x 10mg	5 x 50mg 20 x 10mg
60mg/24h	10mg PRN 4hrly	5 x 50mg 10 x 10mg	5 x 50mg 15 x 10mg	10 x 50mg 15 x 10mg

Cyclizine (50mg in 1mL amps.)

Daily dose	SC PRN	3 days	4 days	5 days
-	50mg PRN 8hrly	15	15	15
150mg/24h	50mg PRN 8hrly	15	20	25

Midazolam (10mg in 2mL amps)

Daily dose	SC PRN	3 days	4 days	5 days
-	2.5-5mg PRN 4hrly	10	10	10
10mg/24h	2.5-5mg PRN 4hrly	10	20	20
20mg/24h	5mg PRN 4hrly	20	20	20
40mg/24h	5-10mg PRN 4hrly	20	30	30
60mg/24h	10mg PRN 4hrly	30	40	40

Levomepromazine (25mg in 1mL amps.)

Daily dose	SC PRN	3 days	4 days	5 days
-	6.25mg PRN 4hrly	10	10	10
12.5mg	6.25mg PRN 4hrly	10	15	15

Haloperidol (5mg in 1mL amps.)

Daily dose	SC PRN	3 days	4 days	5 days
-	2.5-5mg PRN 8hourly	10	10	10
2.5mg/24h (up to 5mg/24h)	2.5-5mg PRN 8hourly	10	15	15
10mg/24h	5mg PRN 4hrly	15	20	20

Hyoscine hydrobromide (0.4mg in 1mL amps.)

Daily dose	SC PRN	3 days	4 days	5 days
-	0.4mg PRN 4hrly	20	20	20
1.6mg/24h	0.4mg PRN 4hrly	20	25	30