

GUIDELINES WHEN USING COMMUNITY PALLIATIVE MAAR CHARTS

These charts are Medicines Authorisation and Administration Records (MAAR), for use when any patient requires a syringe pump to deliver their medication in the community. They may also be used on in-patient units where in-house prescriptions do not provide the necessary space and scope.

Notes for prescribers

- The Palliative Network Guidelines are available on line at <http://book.pallcare.info>. Contact your palliative care team for advice if required.
- When prescribing dose ranges consider use of the word 'to' rather than a dash, e.g. *morphine 5mg to 10mg*. A dash can be misread and lead to errors.
- When prescribing small doses and only where clinically appropriate, consider using whole numbers for doses as this is clearer, e.g. *oral morphine 1mg to 2mg*.
- Doses less than 1mg should be written in micrograms, e.g. 500 microgram to 1mg alfentanil, 600 microgram to 1.2mg glycopyrronium.
- Clarify which medication is to be used 1st line and 2nd line when prescribing more than one for the same indication.
- Be mindful of the number of prn doses given recently in addition to the regular medicines when converting oral pain relief doses to syringe driver doses
- For the management of breathlessness, opioids may be appropriate. Contact your palliative care team for advice.
- The maximum "as required" (PRN) dose does not need to take into account the dose being administered in the syringe pump. However when it comes to administering PRN doses the nurse should check what is currently being administered in the syringe pump to calculate how many additional PRNs can be given before the maximum is reached. For example, a PRN dose of morphine prescribed as 5mg and max is 30mg over 24hrs. If the syringe pump already contains 20mg then that would mean you can only give two additional PRN doses in 24 hrs
- There is no legal requirement for how long these charts are valid for. They should be reviewed regularly enough to meet the clinic requirements of the patient. For example, consider reviewing the charts if they have been written \geq 4 weeks ago for the administration of anticipatory medications and these medications are now required, if a patient's clinical condition deteriorates, when a further supply of medications needs to be prescribed. This should be documented in the healthcare records.
- Page 1 is to be used for medications to be delivered via a syringe driver. Page 2 is for 'as required' (PRN) medication. Page 3 has two sections; the top section is for regular doses of other subcutaneous injections such as Dexamethasone etc. and the bottom section is for crisis/emergency use medications for patients who may be at risk of fitting or catastrophic bleed i.e. bigger doses of Midazolam.

Notes for nurses

- The contents of the syringe must be written clearly on a standard syringe pump label attached to the barrel of the syringe. Be aware of how to obtain supplies of these labels.
- Confirm the contents of a syringe pump already running when the patient crosses from one care setting to another. Do this using at least two sources of information, for example: syringe pump label, syringe pump infusion administration record, discharge/referral letter.
- Ensure sufficient stock of injections in the home. Pay particular attention before w/ends and bank holidays.
- These charts are only for injectable medications. Please check if a second Community Drug Chart is in use for Patches, Enemas etc. and that all nurses in the team are aware. A prompt has been added to the syringe driver chart on page 1.
- If a range of doses is prescribed, aim to administer the lowest possible dose of medication to control symptoms. If symptoms remain uncontrolled or if you need advice, contact the palliative care team.

Notes on disposal of unwanted medications

- Medications that have been prescribed for patients remain their own property.
- Encourage carers to return unwanted medications to a community pharmacy for safe disposal (this does not have to be the pharmacy that dispensed the medications).
- Practitioners can remove medications for disposal at their own discretion, for example where they consider there to be a risk if left in the home.
- Where possible practitioners should obtain a verbal consent from the patient/carers to remove unwanted medications on their behalf and document this in the clinical notes. For controlled drugs complete the 'CD Stock Balance Chart'.
- Be aware of any local guidance for the disposal of unwanted medications.

Notes if using other syringe pump community charts

- Transcribing clinical information is a high risk process. Please refer to local guidelines where necessary.
- Always contact the referring clinical team if more advice is needed.

NB: Both prescribers and healthcare professionals administering medications share governance and responsibility for the authorisation and administration charts

Helpful information	
Palliative care team name/contact details:	Community pharmacy name/contact details:

Guide to subcutaneous injections for symptom control (Drugs and doses for MAAR chart)

SYMPTOM	DRUG	PRN dose for breakthrough (subcutaneous, SC) <i>Onset of action</i>	SYRINGE DRIVER DOSE (continuous subcutaneous infusion, CSCI) over 24 hours <i>Check compatibility</i>	Usual total Maximum dose/ 24 hours	Think box	Ampoule sizes available
PAIN	Morphine	Divide 24h dose by 6, give 2 to 4 hourly. Increase PRN doses in line with syringe driver.	For opiate naive patients 10-15mg For patients already taking oral morphine divide total 24h dose by 2.	No upper limit but prescriber may indicate a max dose	Contact specialist for use of alternative opioids. Increase syringe driver by total PRN needed in 24 hours	10mg, 15mg, 20mg, 30mg/ml in 1ml or 2ml amps
	Haloperidol	0.5 - 1.5mg every 8 hours <i>within 10-15 minutes</i>	1-5mg	5mg	Metabolic causes Anxiolytic/sedative High doses for delirium and psychosis	5mg/1ml
NAUSEA and VOMITING cause of nausea determines the anti-emetic choice	Metoclopramide	10-20mg every 8 hours <i>within 15 minutes</i>	30-60mg	80mg	Do not use if bowel colic prokinetic in upper GI tract.	10mg/2ml
	Cyclizine	50mg every 8 hours <i>within 2 hours</i>	100-150mg	150mg	Useful in bowel obstruction and raised ICP	50mg/1ml
	Levomepromazine	6.25 - 12.5mg every 8 hours <i>within 30 minutes</i>	6.25- 25mg	25mg	2nd or 3rd line Also anxiolytic Avoid if risk of fitting	25mg/ml
ANXIETY, TERMINAL AGITATION	Midazolam	2.5 - 5mg every 2 - 4 hours <i>within 5 - 10 minutes</i>	10 - 30mg	60mg	Consider lorazepam 0.5 - 1mg po as sublingual (recognised unlicensed indication) Think of cause e.g. pain/ constipation/urinary retention	10mg/2ml
	Levomepromazine	6.25 - 12.5mg every 8 hours <i>within 30 minutes</i>	12.5mg - 50mg	100mg	2nd line	25mg/ml
RESPIRATORY SECRETIONS	Glycopyrronium	200 -400mcg every 6-8 hours <i>Within 30-40 minutes</i>	600mcg - 1200mcg	1200mcg	Reposition patient Reassure relatives	200mcg/1ml 600mcg/3mls
SEIZURES	Midazolam	10-20mg stat s/c	20-60mg/24 hours		if on anticonvulsant and now unable to take orally	10mg/2mls ampoules
	Buccal Midazolam	10mg Buccal stat				Buccolam® 10mg/2mls Epistatus® 10mg/ml

What to put on your FP10 prescription when issuing medication

Drug	Prescription Instructions	Quantity (adjusted quantity depending on patient need and advise from District Nurses/ Clinical Nurse Specialists)
Morphine Sulphate Injection (CD Schedule 2)	2.5 – 5mg (0.25 - 0.5ml) to be given by subcutaneous injection when required for pain or breathlessness up to 2-4 hourly	Supply 5 (five) x 10mg/1ml ampoules
Haloperidol Injection	0.5 – 1.5mg (0.1 – 0.3ml) to be given subcutaneous injection when required for nausea 8 hourly	Supply 5 x 5mg/1ml ampoules
Midazolam Injection (CD Schedule 3)	2.5 – 5mg (0.5 – 1ml) to be given by subcutaneous injection when required for agitation/restlessness 2- 4 hourly	Supply 5 (five) x 10mg/2ml ampoules
Glycopyrronium Bromide Injection	200 – 400 micrograms (1- 2ml) to be given subcutaneously when required for respiratory secretions 6 - 8 hourly	Supply 5 x 200mcg/1ml ampoules
Water for Injection	Use as diluent	Supply 10 x 10ml ampoules
Levomepromazine 2 nd /3 rd line	6.25mg – 12.5mg (0.25 – 0.5ml) to be given subcutaneously when required for nausea and vomiting every 8 hourly	Supply 5 x 25mg/ml ampoules
Lorazepam tablets (if patient conscious) Prescribe PO to be used sublingually - recognised unlicensed indication.	0.5 – 1mg to be given sublingually 2-4 hourly when required for breathlessness/ anxiety/ agitation (max 4mg/24 hours)	Supply 15 x 1mg tablets

1. CONTINUOUS SUBCUTANEOUS INFUSION FROM A SYRINGE PUMP AUTHORISATION CHART

When transferring care, confirm current and/or anticipatory drugs and doses using the authorisation charts.
This document should remain with the patient.

Patient name:	DOB:	NHS number:
Allergies and adverse drug reactions	<input type="checkbox"/> no known allergies	
Allergies and Reaction		
Prescriber sign & print:		

Prescriber contact details:	
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These charts are only for injectable drugs. Please tick this box if a second/another Community Drug Chart are in use for Patches, Enemas etc.

Pain			
Date:	Medication:	Dose range:	Prescriber sign & print:
Nausea / Vomiting			
Date:	Medication:	Dose range:	Prescriber sign & print:
Agitation / Distress			
Date:	Medication:	Dose range:	Prescriber sign & print:
Respiratory tract secretions			
Date:	Medication:	Dose range:	Prescriber sign & print:
Other medication – specify indication here:			
Date:	Medication:	Dose range:	Prescriber sign & print:
Other medication – specify indication here:			
Date:	Medication:	Dose range:	Prescriber sign & print:
DILUENT			
Date:	Diluent:	Prescriber sign & print:	

2. 'AS REQUIRED' (PRN) SUBCUTANEOUS INJECTIONS AUTHORISATION AND ADMINISTRATION CHART

Patient name:		DOB:				NHS number:									
Allergies and adverse drug reactions		<input type="checkbox"/> no known allergies													
Allergies and Reaction															
Prescriber sign & print:															
Pain	Date														
Medication:	Time														
Dose range: Max frequency: Max 24 hour dose: Subcut <input checked="" type="checkbox"/> Prescriber sign, print & date:	Dose														
	Sign														
Nausea / Vomiting	Date														
Medication:	Time														
Dose range: Max frequency: Max 24 hour dose: Subcut <input checked="" type="checkbox"/> Prescriber sign, print & date:	Dose														
	Sign														
Agitation / Distress	Date														
Medication:	Time														
Dose range: Max frequency: Max 24 hour dose: Subcut <input checked="" type="checkbox"/> Prescriber sign, print & date:	Dose														
	Sign														
Respiratory tract secretions:	Date														
Medication:	Time														
Dose range: Max frequency: Max 24 hour dose: Subcut <input checked="" type="checkbox"/> Prescriber sign, print & date:	Dose														
	Sign														
Other –Medication	Date														
Medication:	Time														
Dose range: Max frequency: Max 24 hour dose: Subcut <input checked="" type="checkbox"/> Prescriber sign, print & date:	Dose														
	Sign														
Other –Medication	Date														
Medication:	Time														
Dose range: Max frequency: Max 24 hour dose: Subcut <input checked="" type="checkbox"/> Prescriber sign, print & date:	Dose														
	Sign														

REGULAR AND CRISIS/ EMERGENCY SUBCUTANEOUS AND INTRAMUSCULAR INJECTIONS
AUTHORISATION CHART

When transferring care, confirm current and/or anticipatory drugs and doses using the authorisation charts.
 This document should remain with the patient.

Patient name:	DOB:	NHS number:
Allergies and adverse drug reactions	<input type="checkbox"/> no known allergies	
Allergies and Reaction		
Prescriber sign & print:		

REGULAR DOSE SUBCUTANEOUS INJECTIONS

Specify indication here:	Date:																		
Medication:	Enter administration times																		
Dose range: <input type="checkbox"/> Subcut																			
Prescriber sign, print & date:																			
Specify indication here:	Date:																		
Medication:	Enter administration times																		
Dose range: <input type="checkbox"/> Subcut																			
Prescriber sign, print & date:																			

CRISIS / EMERGENCY USE ONLY: SUBCUTANEOUS OR INTRAMUSCULAR INJECTIONS i.e. for fitting or catastrophic bleed

Specify indication here:	Administration record:	Administration record:	Administration record:
Medication:	Date:	Date:	Date:
	Time:	Time:	Time:
Dose: Route:	Dose:	Dose:	Dose:
Max 24 hour dose:			
Prescriber sign, print & date:	Sign:	Sign:	Sign:
Specify indication here:	Administration record:	Administration record:	Administration record:
Medication:	Date:	Date:	Date:
	Time:	Time:	Time:
Dose: Route:	Dose:	Dose:	Dose:
Max 24 hour dose:			
Prescriber sign, print & date:	Sign:	Sign:	Sign:

[Insert organisation logo here]

THE FOLLOWING PAGES ARE FOR COMPLETION BY THE DISTRICT NURSES.

- **Please print**
- **Ensure they are kept in patient's home**

**THEY DO NOT NEED ANY INPUT FROM THE
GP/HOSPITAL DOCTORS**

6. CURRENT SUBCUTANEOUS T34 SYRINGE PUMP INFUSION ADMINISTRATION RECORD AND CHECKLIST

When transferring care confirm current drugs & doses using this page. This document should remain with the patient

Patient name:	DOB:	NHS number:	Notes: BD Plastipak™ syringe max volumes are: 18mL (for a 20mL syringe) and 23mL (for a 30mL syringe).
Allergies			SERIAL NO. on pump:

1. Contents of syringe						2. Set up pump				
Medication(s):	Dose	Batch no.	Expiry Date	Diluent	Date	mL in syringe at start	Start time	Rate set	Site of needle	Syringe size
				Duration	Nurse print/sign	Battery life remaining (%)		Volume left to be infused (mL) vtbi		
						Time infusion to finish: (h) : (mins)				Visual volume (mL)
						Tick box to confirm additive label attached to syringe <input type="checkbox"/>				

3. Check pump while in use													
Time	Battery light flashing Green? (yes/no)	Battery life remaining (%)	Spare battery available? (yes/no)	Rate on display pad (mL/hr)	Volume left to be infused (mL) 'vtbi'	Visual volume check? (yes/no)	Time remaining? (hrs/mins)	Syringe line & contents clear? (yes/no)	Needle site condition? (ok/re-sited)	Lock keypad (✓)	Patient comfortable? (yes/no)	Any action required? (yes/no)	Sign
										<input type="checkbox"/>			
										<input type="checkbox"/>			
										<input type="checkbox"/>			
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