

Sign and Date each time.

PATIENT

Insight, Aims & Expectations:

FAMILY

Insight, Aims & Expectations:

Palliative Care Pathway

Name of Patient: _____

RELIGIOUS/CULTURAL REQUIREMENTS

a) Religion Identified (please specify) _____

b) If appropriate _____

c) _____

d) _____

e) _____

Professionals Involved

a) _____

e) _____

b) _____

f) _____

c) _____

g) _____

d) _____

h) _____

What is the desired place of care?

1st choice _____

2nd choice _____

3rd choice _____

When referred for DS1500 _____

When pre-paid prescription applied for _____

When prescription exemption form applied for _____

Signature _____

Date: _____

MONTH & DATE													
Drug (Approved name)													
Dose	Route	Start date											
Doctor's Signature													
Drug (Approved name)													
Dose	Route	Start date											
Doctor's Signature													
Drug (Approved name)													
Dose	Route	Start date											
Doctor's Signature													
Drug (Approved name)													
Dose	Route	Start date											
Doctor's Signature													
Drug (Approved name)													
Dose	Route	Start date											
Doctor's Signature													
Drug (Approved name)													
Dose	Route	Start date											
Doctor's Signature													

Known Allergies

Patient Name:

AS REQUIRED MEDICATION PRESCRIPTION CHART

**Medication as required, in addition to regular and syringe driver medication
as per guidelines**

Symptom	Medication	Dose	Frequency	Route	Signature	Date
Nausea / Vomiting	Cyclizine	25-50mg	4hrly	S/C		
Agitation	Midazolam	5-10mg	30mins	S/C		
“Rattle”	Robinul (Glycopyrronium)	200mcg	6-8hrly	S/C		
Pain (See Guidelines)	Diamorphine		75mins	S/C		
Others						

MEDICATION AS NEEDED GIVEN[illegible]

INTEGRATED CARE PATHWAY - DRUG STOCK SHEET

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

INTEGRATED CARE PATHWAY - DRUG STOCK SHEET

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

DRUG:		DRUG:	
STRENGTH OF AMPOULES/SUPP:		STRENGTH OF AMPOULES/SUPP:	
Date	Time	Date	Time
Balance C/F		Balance C/F	
No of amps/supp used		No of amps/supp used	
Amount of drug discarded		Amount of drug discarded	
Amount added to stock		Amount added to stock	
Balance		Balance	
Signature:		Signature:	

Gloucestershire Royal NHS Trust

Monitoring chart for M16A, M26 Syringe drivers (drug delivery 2mm / hour)

Name	GO
------	----

Setting up

Valid prescription
Pt. / family carer informed
Set up pump as per policy
Date next service due
Pump number

Signature

Commencing infusion

mm in syringe before
priming line
Needle site
Start time and date
Expected finish time and date

Date / Time	Syringe volume length in mm	Pump operational (light flashing)	Site checked	Line checked	Site / line changed	Amount + name of drug discarded (In mm's)	Initial
Set up (once primed)							
5 min check							
1 hour check due							
4hrs after set up Time							
4 hrly check Time							
4 hrly check Time							
4 hrly check Time							
4 hrly check Time							
4 hrly check Time							

Line check completed at Hrs Mins Date Initial

SITE

Assess for characteristics of irritation, at injection site (usually due to infusion of cyclizine or methotrimeprazine) red / heat / irritation. If irritation occurs, ensure needle is correctly inserted; dilute drugs in a greater volume using 20 ml syringe; consider changing irritant drugs, or consider alternative route of administration.

Assess for characteristics of drug crystallisation, ie, clouding, or presence of particles in fluid. If crystallisation occurs, stop infusion, renew infusion set + syringe dilute drugs in larger volume in 20 ml syringe, protect syringe from sunlight. Assess for characteristics of leakage, at injection site, at connection site. If leakage occurs change giving set.

N.B If the patient requires to shower / bath with a syringe driver in use, discontinue and discard medication, set up after bath / shower. If this is not possible refer to Palliative Care Team.

TROUBLE SHOOTING

1. INFUSION TOO SLOW / STOPPED

Start button has not been pressed
 Needle blocked or needle site inflamed
 Cannula kinked
 Machine faulty or battery not working
 Syringe not placed correctly in syringe driver

2. INFUSION TOO FAST

Check calculation and rate of infusion
 Machine faulty
 Syringe driver placed too high, infusion siphoned by gravity.

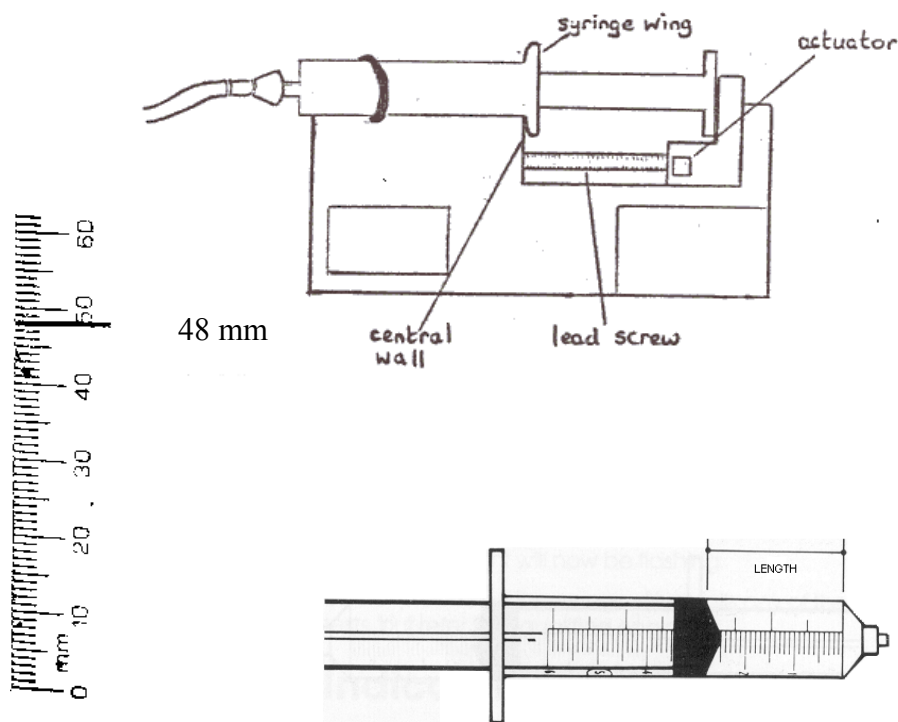
3. TIMELINESS OF DRUG ADMINISTERED

The acceptable variance for infusion rate is $\pm 5\%$

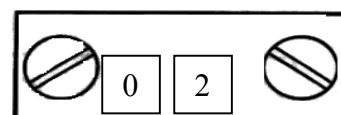
Time	Amount	Acceptable variance From	To
1 hr	2mm	57 mins	1 hr 3 mins
2 hrs	4mm	1hr 54 mins	2 hrs 6 mins
3 hrs	6mm	2 hrs 51 mins	3 hrs 9 mins
4 hrs	8mm	3 hrs 48 mins	4 hrs 12 mins
8 hrs	16mm	7 hrs 36 mins	8 hrs 24 mins
12 hrs	24mm	11 hrs 24 mins	12 hrs 36 mins
16 hrs	32mm	15 hrs 12 mins	16 hrs 48 mins
24 hrs	48mm	22 hrs 48 mins	25hrs 12 mins

If the syringe driver does not infuse within the times stated return to medical Physics and obtain a new pump

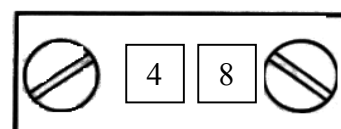
Check Syringe in driver correctly



MS16



MS26



ASSESSMENT GUIDELINES

The following are a guide to your basic patient assessment. This will help you to manage the patient, and guide you as to when to call the Palliative Care Team. These questions will be helpful each time you assess the patient (directly or via nurse or carer). Be prepared to re-assess regularly and follow the symptom control guidelines.

Pain

Assessment

For each pain:

Go back and assess
effect of analgesia

1. Where?
2. How Often?
3. What is it like? e.g. stabbing, throbbing
4. What has helped pain so far?

Nausea

Assessment

1. How often?
2. How severe?
3. Followed by vomiting?
4. Consider causes. e.g. drugs
biochemical
constipation

Vomiting

Assessment

1. How frequent?
2. How much?
3. Associated with nausea?
4. Associated with abdominal pain?
5. Triggers? – food, cough, drugs, movement.
6. Associated with acidity?
7. What is mouth like?
8. Does patient feel thirsty?

Exclude obstruction, (palpate abdomen, listen for bowel sounds)

Confusion

Assessment

1. How long? (Ask family)
2. Consider reversible causes e.g. drugs, full bladder, impacted faeces, brain metastases, infection, hypercalcaemia.
3. How severe?
4. Associated with hallucinations/nightmares?
5. Is patient frightened?
6. Is patient restless or unsafe?

Constipation

Assessment

1. How long?
2. Is it causing symptoms? e.g. rectal discomfort
colic
restlessness
vomiting

Mouth and Lip Problems

Assessment

1. Dry?
2. Painful?
3. Cracked?
4. Ulcerated?
5. Coated tongue?
6. Ill fitting dentures? Is this a problem for patient?

Breathlessness

Assessment

1. How severe? e.g. can patient talk, move, drink, take medication?
2. Affect on patient e.g. anxiety, panic attacks.
3. Associated with pain?
4. Associated with cough?
5. Dry mouth? Dry nose?
6. Rattly chest?

GUIDELINES FOR SYMPTOM CONTROL
For further information see Palliative Medicine Handbook

All prescription sheets to have the following drugs prescribed as prn rescue medication:

Diamorphine s/c can be given every 75 minutes

Cyclizine 50 mg s/c 4 hrly. Max 150mg over 24 hrs

Midazolam 5–10mg s/c. This can be given every 30 minutes if required. Review if ineffective after 40mg

Robinul (Glycopyrronium) 200 mcg s/c 6-8 hrly maximum. Max 1.2mg over 24 hrs.

(Buscopan and cyclizine are incompatible)

If a patient is able to take medication orally continue with that route. Syringe drivers are not always necessary, but are extremely useful if a patient is:

- **unable to swallow**
- **nauseated or vomiting**
- **too weak for oral drugs**
- **unconscious**
- **has poor oral absorption**

We would advocate the subcutaneous route (s/c) at this stage, not intramuscular (i/m). All the drugs mentioned can be given by this route. Consider s/c butterfly needle for regular breakthrough doses.

NAUSEA AND VOMITING

(See page 19 Palliative Medicine Handbook)

Choose an antiemetic based on the most likely cause of nausea and vomiting.

- **drug or metabolic -> Haloperidol (p.o. 1.5–3.0mg nocte + 1.5mg prn) (s/c see below)**
- **gastric stasis -> Metoclopramide (p.o. 10mg tds 30 mins prior to meals) (s/c 30-80mg over 24 hrs)**
- **GI tract involvement or cerebral tumour -> Cyclizine (p.o. 50mg tds) (s/c see below)**

If first choice drug is unsuccessful or only partially successful after 24 hrs, increase the dose and if vomiting is affecting absorption change from oral route to syringe driver. If unsure of cause:-

First Step = Cyclizine 150mg over 24hrs via syringe driver, with loading dose of 25–50mg.

Write up Haloperidol 2.5 – 5.0mg s/c 6 – 8 hourly for breakthrough anti emetic. Max 10mg over 24hrs.

Second Step = **If breakthrough Haloperidol has been beneficial, combine Haloperidol 5mg with Cyclizine 150mg via syringe driver and use Haloperidol 2.5mg for breakthrough anti emetic. Max 10mg over 24 hours.**

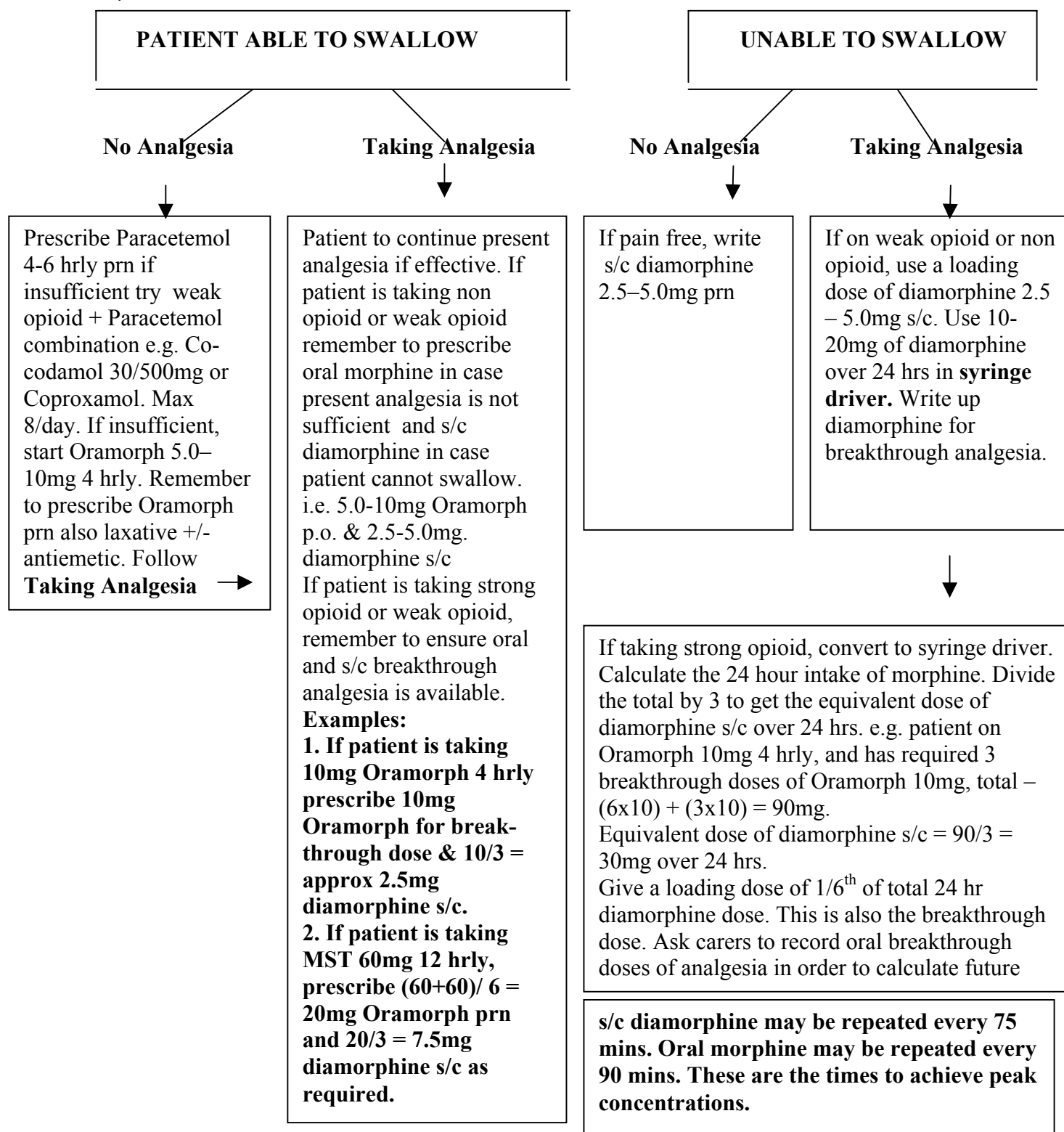
Third Step = If Cyclizine and Haloperidol combination has not been effective, stop both and replace with 12.5 – 25mg of Levomepromazine (Nozinan) over 24 hours via syringe driver. Write breakthrough doses of 6.25mg 6 hourly, max 50mg over 24 hours.

Precipitation may occur with high concentrations of Cyclizine.

DO NOT USE STEMETIL IN A SYRINGE DRIVER.

PAIN CONTROL IN PALLIATIVE CARE

See pg 49 Palliative Medicine Handbook



The “boost” button on the MS26 moves the plunger by 0.23mm after a single activation. With a 10ml syringe it would take more than 30 boosts to come close to a 4 hrly dose. Therefore, the boost button is totally unsuitable for top up medication in palliative care. For those patients who are unable to swallow and receiving diamorphine via a syringe driver, relatives may be taught to give Oramorph concentrate via the buccal route. Give $1/6^{\text{th}}$ of the 24 hr diamorphine dose as an equivalent dose of oral morphine, to be given buccally. Example: 30mg diamorphine s/c over 24 hrs in a syringe driver. Breakthrough dose of diamorphine = 5mg s/c and Oramorph 15mg buccally (0.75ml of Oramorph concentrate 20mg /ml.)

To calculate the subsequent dose of diamorphine, assess the previous 24 hours' requirements.

Eg If a patient has required 3 breakthrough doses of 15mg of diamorphine in the previous 24 hours, with good effect, on top of a 24 hour infusion of 90mg diamorphine in 24 hours in a syringe driver, the next syringe driver would contain $90 + (3 \times 15) = 135\text{mg}$ of diamorphine over 24 hours.

Do not forget to recalculate the appropriate breakthrough dose, eg. $135\text{mg}/6$ is rounded up to 25mg diamorphine subcutaneous for breakthrough analgesia.

If pain persists, consider the other causes of distress: bone pain, neuropathic pain, anxiety, fear, full bladder and treat appropriately.

FENTANYL GUIDELINES

See pg 76 Palliative Medicine Handbook

- If patient using Fentanyl patch, will require oral (if appropriate) and s/c breakthrough analgesia. Give breakthrough doses of diamorphine according to the 'rule of 5' (divide patch strength by 5 and give as milligrams of diamorphine as needed).

Example: Fentanyl 25 mcg patch = 5.0mg diamorphine s/c prn.

5

- If patient has rapidly escalating pain continue to change the patch every 72 hrs and total up breakthrough doses of diamorphine over 24 hr period and put this in a syringe driver, alongside using the patch. Remember to change the breakthrough dose of diamorphine. Titrate the syringe driver dose according to the previous 24 hours requirements.

Example: If patient is on a 50mcg patch and has had 3 breakthrough doses of diamorphine = $3 \times 10\text{mg} = 30\text{mg}$ diamorphine, start syringe driver with 30mg diamorphine over 24 hrs, continuing 50mcg patch AND next breakthrough dose of diamorphine = $\frac{30\text{mg}}{6} = 5.0\text{mg} + \frac{50\text{mcg}}{5} = 10\text{mg} = 15\text{mg}$ diamorphine s/c prn.

OXYCODONE GUIDELINES

See pg 74 Palliative Medicine Handbook

Oxycodone is 1.5 – 2 times as potent as morphine orally. i.e. Oxynorm 5mg = Oramorph 10mg. Oxynorm is an immediate release preparation (cf Oramorph). Oxycontin is a controlled release preparation (cf MST)

To convert oral oxycodone to s/c diamorphine:- $\frac{(24 \text{ hr intake of Oxycodone}) \times 2}{3} = \text{s/c diamorphine over 24 hrs}$

Initiation of Oxycodone must be in conjunction with Palliative Care Team

BREATHLESSNESS

See pg 89 Palliative Medicine Handbook

In the last few weeks consider:

1. Oral morphine.
2. Anxiolytic e.g. Diazepam 2.0–5.0mg nocte + Lorazepam 1.0–2.0mg s/l or p.o. prn for pain attacks.
3. Nebulised saline 5 mls qds.
4. Relaxation techniques.
5. Fan.
6. Room temperature to suit patient.
7. Trial of humidified Oxygen

In the last few days:

For best effect, a combination of diamorphine and Midazolam.

If opioid naïve use

Diamorphine 5.0mg and Midazolam 5.0mg via syringe driver subcutaneously over 24 hours.

Breakthrough doses of 2.5 mg of each to be given together 1-2 hourly.

(Midazolam 2.5-5.0mg can be given every 30 minutes if required)

Titrate the syringe driver dose according to previous 24 hour requirements

If already having diamorphine for pain

Continue to give that dose plus 1/3 extra for breathlessness via syringe driver. Give 1/6 of total Diamorphine dose 1-2 hourly for continuing breathlessness.

Start Midazolam 5.0mg s/c via same syringe driver over 24 hours and give 2.5mg–5.0mg s/c up to every 30 minutes for continuing breathlessness.

INTESTINAL OBSTRUCTION

See pg 25 Palliative Medicine Handbook

(Common in ovarian cancer and peritoneal disease)

BOWEL OBSTRUCTION

The aim is to stop nausea and pain, and to reduce the frequency of vomits to one or two per day. Complete cessation of vomiting may be impossible in a complete obstruction. Consider:

1. Low fibre diet if tolerated.
2. Continue with oral laxative if tolerated. Consider Docusate if gripes present.
3. Consider trial of Metoclopramide 30-40mg p.o. +/- Dexamethasone 8mg p.o. for 5 days
If vomiting is affecting absorption, use Metoclopramide 30-60mg s/c in syringe driver over 24 hours and give Dexamethasone 4mg s/c via indwelling butterfly at 8 am and noon.
4. Add Robinul for colic, 200mcg p.o. 8 hrly or 200-600mcg s/c over 24 hrs.

Contact Palliative Care Team for further advice

NOISY BREATHING DUE TO RESPIRATORY TRACT SECRETIONS

See pg 97 Palliative Medicine Handbook

If rattly breathing present give the following early:

Robinul 200mcg s/c. May be repeated after 30 mins and then start 800mcg in syringe driver. After 24 hours, add the previous 24 hour requirement to the syringe driver. Max 1.2mg / 24 hours.

MOUTHCARE

See pg 46 Palliative Medicine Handbook

1. 2 hourly mouthcare is optimum using toothpaste with toothbrush and/or pink sponges and warm water to rinse mouth.
2. Use Oral Balance gel preparation after mouthcare, to keep mouth moist when dry mouth is a problem. Build up of preparation needs to be removed prior to re-application of Oral Balance gel.
3. Difflam diluted 50:50 in warm water for sore mouth, if able to use mouth wash
4. Fluconazole 150mg stat orally for oral thrush.
5. Lignocaine gel to painful area in mouth
6. Regular analgesia for painful mouth, as per analgesia guidelines, if topical agents not sufficient or appropriate.
7. Yellow paraffin or lip balm for dry lips.
8. Use humidified oxygen, if oxygen required.

CONSTIPATION

See pg 29 Palliative Medicine Handbook

Keep it simple. Use Oral laxative, consider Co-danthramer, unless incontinent.
Bowel care can be used for quick relief if constipation is causing symptoms.
In the last few days, treat for comfort i.e. if causing symptoms use rectal measures for quick relief e.g. suppositories or manual removal. If unable to tolerate rectal measures, treat symptoms caused by constipation.

TERMINAL RESTLESSNESS, AGITATION AND ANXIETY

See pg 108 Palliative Medicine Handbook

Having checked for reversible causes:

Consider:

Add 10mg Midazolam to syringe driver over 24 hours.

Give 5–10mg Midazolam every 30 minutes until patient settles.

If patient has required 40mg Midazolam with little effect, please seek advice.

Delirium and confusion - See pg 105, Palliative Medicine Handbook.

STEROIDS

See pg 126 Palliative Medicine Handbook

Continue with steroids if they have been effective, otherwise tail off. If unable to take orally, give s/c either as o.d. or b.d. dose via s/c butterfly (preferably in the morning) or via separate syringe driver.

ANTICONVULSANTS IN LAST FEW DAYS

See pg 109 Palliative Medicine Handbook

If a patient is no longer able to take anticonvulsants for fits by the oral route, use starting dose of 30mg of Midazolam s/c over 24 hrs in syringe driver, as an alternative anticonvulsant. This will be sedating.
If sedation is to be avoided, consider rectal anticonvulsants. Discuss with Palliative Care Team or pharmacy.

If further advice is required please contact your nearest palliative care team or drug information service on the following numbers:

Hospital Palliative Care Team, Gloucestershire Royal Hospital: 08454 – 225179

Community Macmillan Team, West of County: 01452 – 371022

Gloucestershire Royal Hospital Medicines (Drug) Information Service: 08454 – 226108/226516

Hospital Palliative Care Team, Cheltenham General Hospital: 08454 – 223447

Community Macmillan Team, East of County: 08454 - 222813

Cheltenham General Hospital Medicines (Drug) Information Service: 08454 - 223030

COMPATIBLE DRUG COMBINATIONS FOR SYRINGE DRIVER

BEWARE: The section on syringe drivers in the BNF is confusing.

The following combinations are visually compatible at usual concentrations. All the combinations below can be made up in water for injections. The information refers to **subcutaneous** use and should not be extrapolated to any other route of administration. There is insufficient data on the combination of the four key drugs, however, if the need arises, combine the four and if thought to be clinically effective, continue otherwise use two syringe drivers.

Use a **20ml** syringe when mixing **3 or 4** drugs together for use in a driver.

Diamorphine #	Diamorphine
Cyclizine #	Cyclizine
	Glycopyrronium (Robinul)
Diamorphine	Diamorphine
Haloperidol	Levomepromazine (Nozinan)
Diamorphine	Glycopyrronium (Robinul)
Levomepromazine (Nozinan)	
Diamorphine	Diamorphine
Midazolam	Cyclizine
	Midazolam
Diamorphine	Diamorphine
Cyclizine	Cyclizine
Haloperidol	Haloperidol
	Glycopyrronium (Robinul)
Diamorphine	
Levomepromazine (Nozinan)	
Midazolam	

Ratios of diamorphine to cyclizine of 1:1 are stable up to 20mg/ml i.e. 150mg of both drugs in 7.8ml (7.8ml is the recommended volume to give a 48mm column length in a Becton Dickinson 10ml syringe). Increased diamorphine concentration requires cyclizine reduction to 10mg/ml.

Drugs such as diclofenac, octreotide, ketamine and dexamethasone have been used in s/c syringe drivers on the advice of a Palliative Care Specialist.

Diclofenac should always go in sodium chloride 0.9% in a separate driver.

Sodium chloride is the recommended diluent for octreotide and ketamine.

Dexamethasone can cause crystallisation in drivers and so it can be helpful to give it as a single or divided s/c doses (before 12 noon, to avoid sleep disturbance).

Nozinan is now routinely diluted with water (saline can be used).

WHILE THESE GUIDELINES ARE INTENDED AS AN AID TO RATIONAL PRESCRIBING, RESPONSIBILITY FOR ANY PRESCRIPTION LIES WITH THE PRESCRIBER

These Guidelines are based on:

Changing Gear: National Hospice Council 1998

All Wales Palliative Medicine Guidelines 1998

Palliative Care Prescribing Notes 2000 – Guidelines for the Use of Drugs in Pain and Symptom Control, Palliative Care Gloucestershire.

Palliative Medicine Handbook. I.N. Back. 3RD Edition. www.pallmed.net

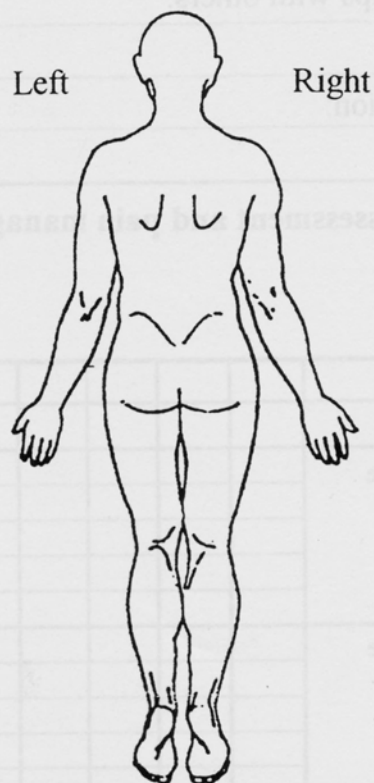
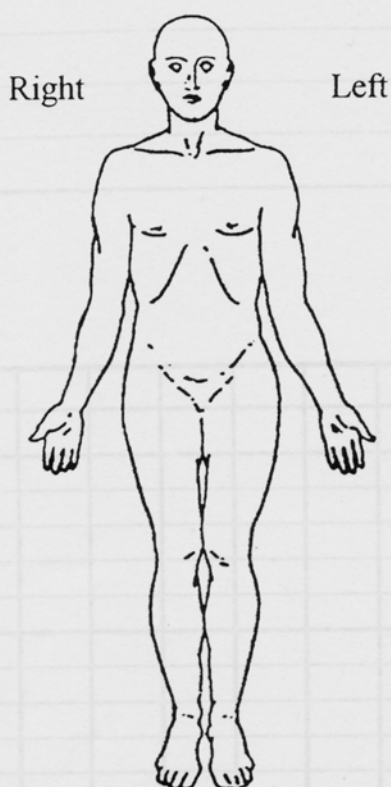
DATE: 14/02/03

S:\ALISON\PCP 2003\PCP 03 pgs 2 -17.doc Last printed 10/05/2003 2:33 PM

Gloucestershire Royal NHS Trust
PAIN ASSESSMENT CHART (Chronic Pain)

Name: _____
 Ward: _____

Hospital No: _____
 Date: _____



Please indicate where pain is felt. Label each site of pain - A, B, C etc.

Site	Patient's description of pain	What makes it worse?	What makes it better?
A			
B			
C			
D			

When is pain present?

1. At night? A B C D
2. At rest? A B C D
3. On movement? A B C D

(Please circle when pain is present)

History of analgesia and its effectiveness

Effects of pain on:

Sleep:

Appetite:

Physical activity:

Relationships with others:

Emotions:

Concentration:

Other:

Plan for assessment and pain management:

DATE																			
TIME																			
Very Severe																			
Severe																			
A. Moderate																			
Mild																			
No Pain																			
Very Severe																			
Severe																			
B. Moderate																			
Mild																			
No Pain																			
Very Severe																			
Severe																			
C. Moderate																			
Mild																			
No Pain																			
Very Severe																			
Severe																			
D. Moderate																			
Mild																			
No Pain																			
ANALGESIA Name, route and dose																			
ACTIVITY and COMMENTS																			

WOE175