

LIVERPOOL CARE PATHWAY

CARE HOME

Patient's/ Resident's full name..... DOB..... NHS no.....

The aim of this pathway is to provide the best possible care for the patient / resident at the end stage of their life, ensuring only appropriate interventions and providing relief of symptoms. This Pathway has been adapted from the national version of the Liverpool Care Pathway for the dying phase (usually the last few days of life) and is intended as a guide to treatment and an aid to documenting progress.

Instructions for use

1. All goals are in **heavy** typeface. Interventions which act as prompts to support the goals are in normal type.
2. Practitioners are free to exercise their own professional judgment; however, any alteration to the practice identified within this Pathway must be noted as a variance on the appropriate sheet.
3. This Pathway replaces all other documentation.

Criteria for use of the Pathway

Only start the resident / patient on the Pathway if all the following criteria are applicable:

- All possible reversible causes for current condition have been considered and the multiprofessional team has agreed the patient is dying.
- There is a shortened life prognosis and may be a decreased level of consciousness.
- The resident / patient is not for Cardio- Pulmonary Resuscitation.

Triggers to consider supporting the decision making process:

The patient is bed - bound Semi – comatose
Only able to take sips of fluids No longer able to take tablets

Preferred Priorities of Care

Preferred place of care discussed with patient / family? Yes No

If so, please document below

Home Hospice Hospital Care Home

If preferred place of care not feasible please document reason(s)

.....
.....

Continuing Care

Is the patient / resident under Continuing Care? Yes No

Relevant Healthcare Professionals Involved

District Nurse Yes No Macmillan Nurse Yes No Hospice at Home Yes No
Name..... Tel no: 533331 Tel no: 529511 ext 513
Tel no.....

Other, please state.....
Tel. no

Other, please state.....
Tel. no

Name of GP.....

Named Responsible Person:

THIS SECTION TO BE COMPLETED BY GP

Primary Diagnosis.....

Secondary Diagnosis.....

Goal 1. Current medication assessed and non- essentials discontinued Yes No

- Appropriate oral drugs converted to subcutaneous route and syringe driver prescribed if appropriate.
- Inappropriate medication discontinued.

Goal 2. PRN subcutaneous medication written up.

In the last few days of life, patients often develop symptoms at a time when they are unable to swallow oral medication. This often happens at night or weekends when access to drugs is limited. Thus, it is always helpful to anticipate these problems and prescribe prophylactically. This is good medical practice and no person working within these guidelines need fear legal sanction.

It is considered best practice that the following drugs are prescribed for all dying patients:

Analgesia Yes No

For opiate naïve patient (not on opiates) prescribe Morphine Sulphate or Diamorphine 2.5 – 5mg s/c prn. For patient already taking oral morphine prescribe 1/3 the oral dose as s/c Diamorphine e.g. if taking 30mg oral Morphine 4 hrly then prescribe Diamorphine 10mg s/c prn for use if swallowing becomes difficult. See overleaf for conversions for opioid drugs.

Antiemetic Yes No

Levomopromazine 2.5mg s/c qds (or 5 - 12.5 mg / 24hrs via syringe driver)

Anxiolytic for Terminal Restlessness or Dyspnoea Yes No

Midazolam 2.5 mg – 5mg s/c prn (or 5 - 20 mg / 24hrs via syringe driver)

Anticholinergic to reduce secretions Yes No

Glycopyrronium (Robinul) 400 micrograms s/c tds prn (or 1.2mg / 24hrs via syringe driver)

Goal 3. To promote comfort and avoid futile investigations, procedures and treatments that are not in the patient's / resident's best interest consider the discontinuation of the following if appropriate.

Blood Tests Yes No N/A

Antibiotics Yes No N/A

IV's (IV/SC fluids / IV medications) Yes No N/A

Deactivate Internal Cardiac Defibrillator Yes No N/A

Not for cardiopulmonary resuscitation recorded Yes No

Out of hours 'by pass card' completed Yes No

Doctors Signature..... **Date**.....

IF THE ANSWER IS NO TO ANY QUESTION IN THIS SECTION CHART AS A VARIANCE ON PAGE 13

To be completed by GP

PRESCRIBING GUIDELINES FOR LAST FEW DAYS OF LIFE

<p>In the absence of any known sensitivities or contraindications e.g. renal failure it is suggested that the following four drugs in the boxes below are prescribed</p>	<p align="center">Syringe Drivers</p> <p>If frequent (more than 2/day) doses of any of these drugs are required then consider starting a s/c infusion using a syringe driver. See box on left for recommended ranges. The dose of diamorphine or morphine sulphate is calculated from the total number of prn injections given in 24hrs or can also be calculated from the 24hr dose equivalent of oral morphine divided by three. Breakthrough dose is calculated as 1/6th of the total 24 hour opioid. To control symptoms a separate prn dose may be required immediately prior to commencing the syringe driver.</p>	
<p>1. Strong opiate injection (according to local availability) a. For opiate naïve (not on opiates) patient prescribe morphine sulphate or diamorphine 2.5 - 5mg s/c prn. b. For conversions of oral morphine to s/c morphine, s/c diamorphine or other opioid drugs see conversion chart below [<i>Quantity 5 / 10 amps</i>]</p>	<p align="center">Fentanyl patches</p> <p>These are not a good choice for end of life analgesia primarily because dose titration is too slow. However, if the patient already has a patch in situ then continue to change this every third day. If breakthrough pain occurs give diamorphine injections either prn (see box below) or by continuous infusion via syringe driver (seek advice).</p>	
<p>2. Antiemetic injection Levomopromazine 2.5mg s/c qds prn (or 5 – 12.5mg / 24hrs via syringe driver) [<i>25mg / 1ml, 1ml ampoules - Quantity 10 amps</i>]</p>	<p>Fentanyl patch strength microgram per hour</p> <p>25mcg / hr</p>	<p>Additional diamorphine S/C PRN dose</p> <p>1.25mg – 5mg</p>
<p>3. Anxiolytic injection Midazolam 2.5 - 5mg s/c prn (or 5 – 20mg / 24hrs via syringe driver) [<i>5mg / ml, 2ml ampoules - Quantity 10 amps</i>]</p>	<p>50mcg /hr</p>	<p>7.5mg – 10mg</p>
<p>4. Anticholinergic injection to reduce secretions Glycopyrronium (Robinul) 400 micrograms s/c tds prn (or 1.2mg / 24hrs via syringe driver) [<i>200 micrograms /1 ml, 3ml ampoules - Quantity 9 amps</i>]</p>	<p>75mcg/hr</p>	<p>12.5mg – 15mg</p>
	<p>100mcg / hr</p>	<p>20mg</p>
	<p>Remember that any calculation of breakthrough (prn) dose will need to take into account the Fentanyl and other opiates given</p>	

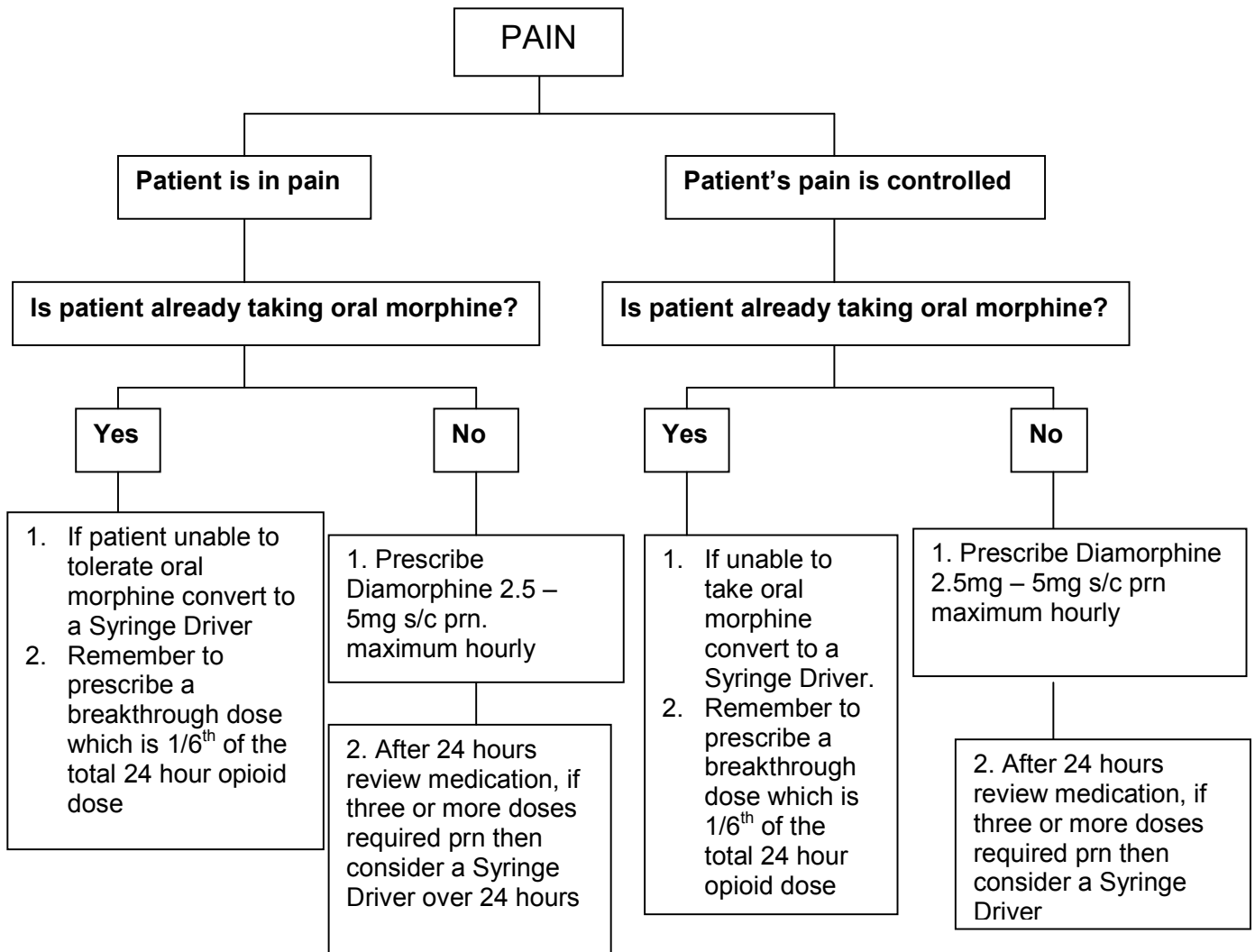
These guidelines are based on best practice. If necessary seek advice from the Specialist Palliative Care Team ☎529511

A GUIDE TO EQUIVALENT DOSES FOR OPIOID DRUGS

N.B. – this is to be used as a guide rather than a set of definitive equivalences. The advice is always to calculate doses using morphine as standard and to adjust them to suit the patient and the situation. Some of these doses have by necessity been rounded up or down to fit in with the preparations available.

Oral Morphine			Subcutaneous Morphine		Subcutaneous Diamorphine		Oral Oxycodone			Subcutaneous Oxycodone		Fentanyl transdermal	Subcutaneous Alfentanil	
4 hr dose (mg)	12 hr SR dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	12 hr SR dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	24 hr total dose (mg)	Patch strength (micrograms)	4 hr dose (mg)	24 hr total dose (mg)
5	15	30	2.5	15	1.25	10	2.5	7.5	15	1.25	7.5	25mcg	0.125	1
10	30	60	5	30	2.5 - 5	20	5	15	30	2.5	15	25mcg	0.25	1.5
15	45	90	7.5	45	5	30	7.5	25	50	3.75	25	25mcg	0.5	3
20	60	120	10	60	7.5	40	10	30	60	5	30	50mcg	0.75	4
30	90	180	15	90	10	60	15	45	90	7.5	45	50mcg	1	6
40	120	240	20	120	12.5	80	20	60	120	10	60	75mcg	1.25	8
50	150	300	25	150	15	100	25	75	150	12.5	75	75mcg	1.5	10
60	180	360	30	180	20	120	30	90	180	15	90	100mcg	2	12
70	210	420	35	210	25	140	35	105	210	17.5	100	125mcg	2.5	14
80	240	480	40	240	27.5	160	40	120	240	20	120	125mcg	2.5	16
90	270	540	45	270	30	180	45	135	270	max	135	150mcg	3	18
100	300	600	50	300	35	200	50	150	300	s/c	150	150mcg	3.5	20
110	330	660	55	330	37.5	220	55	165	330	vol	165	175mcg	3.75	22
120	360	720	60	360	40	240	60	180	360		180	200mcg	4	24

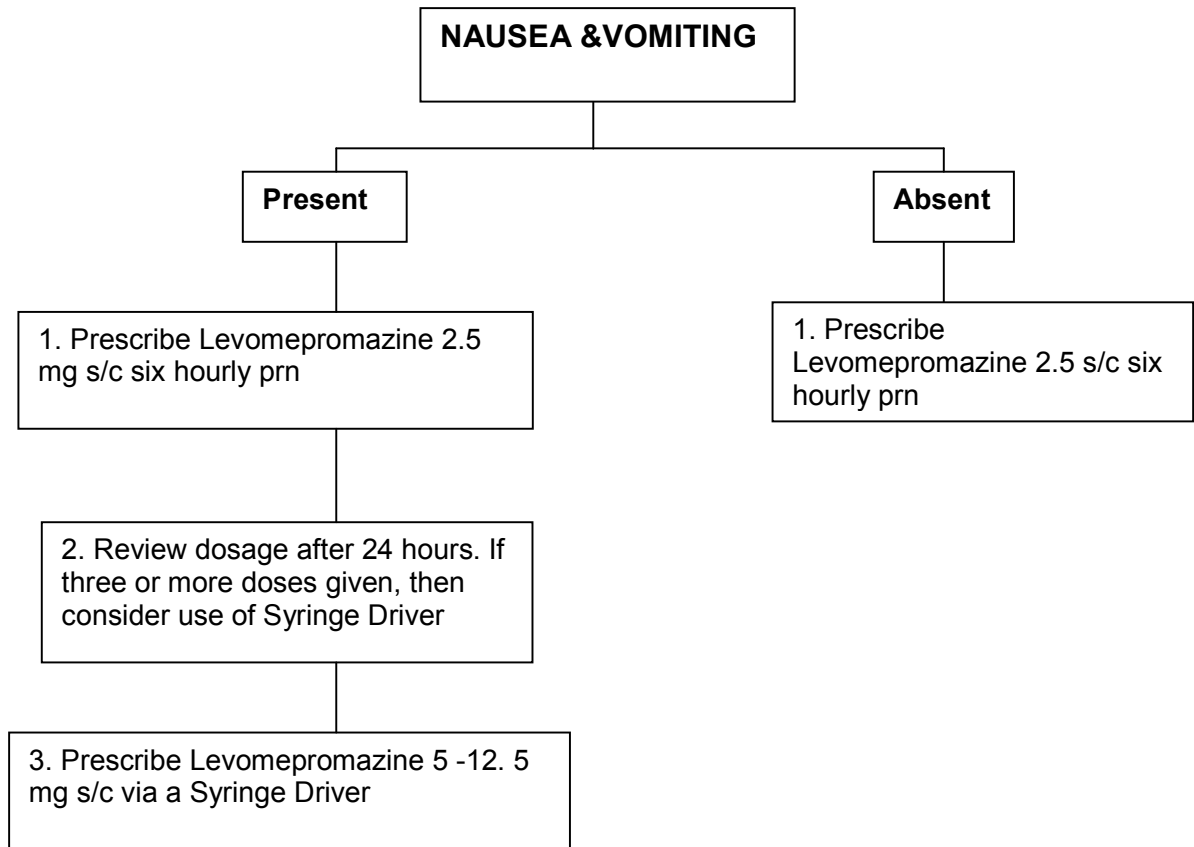
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Supportive information

- To convert a patient from oral morphine to a 24hr s/c infusion of Diamorphine divide the total daily dose of morphine by 3 e.g. Zomorph 30mg bd orally = Diamorphine 20mg via a s/c Syringe Driver.
- Prescribe prn / breakthrough dose of Diamorphine as indicated in the above flow chart. Anticipatory prescribing will ensure that in the last hours / days of life there is no delay in responding to symptoms if they occur.
- If no apparent benefit from 2 – 3 breakthrough doses, please contact the Specialist Palliative Care Team for advice.
- Fentanyl patches are not a good choice for end of life analgesia. However, if the patient already has a patch insitu then continue to change every third day. If breakthrough pain occurs give Diamorphine injections prn. See conversion chart on page 4 of the pathway for equivalent prn dose of Diamorphine. Seek advice if in any doubt.

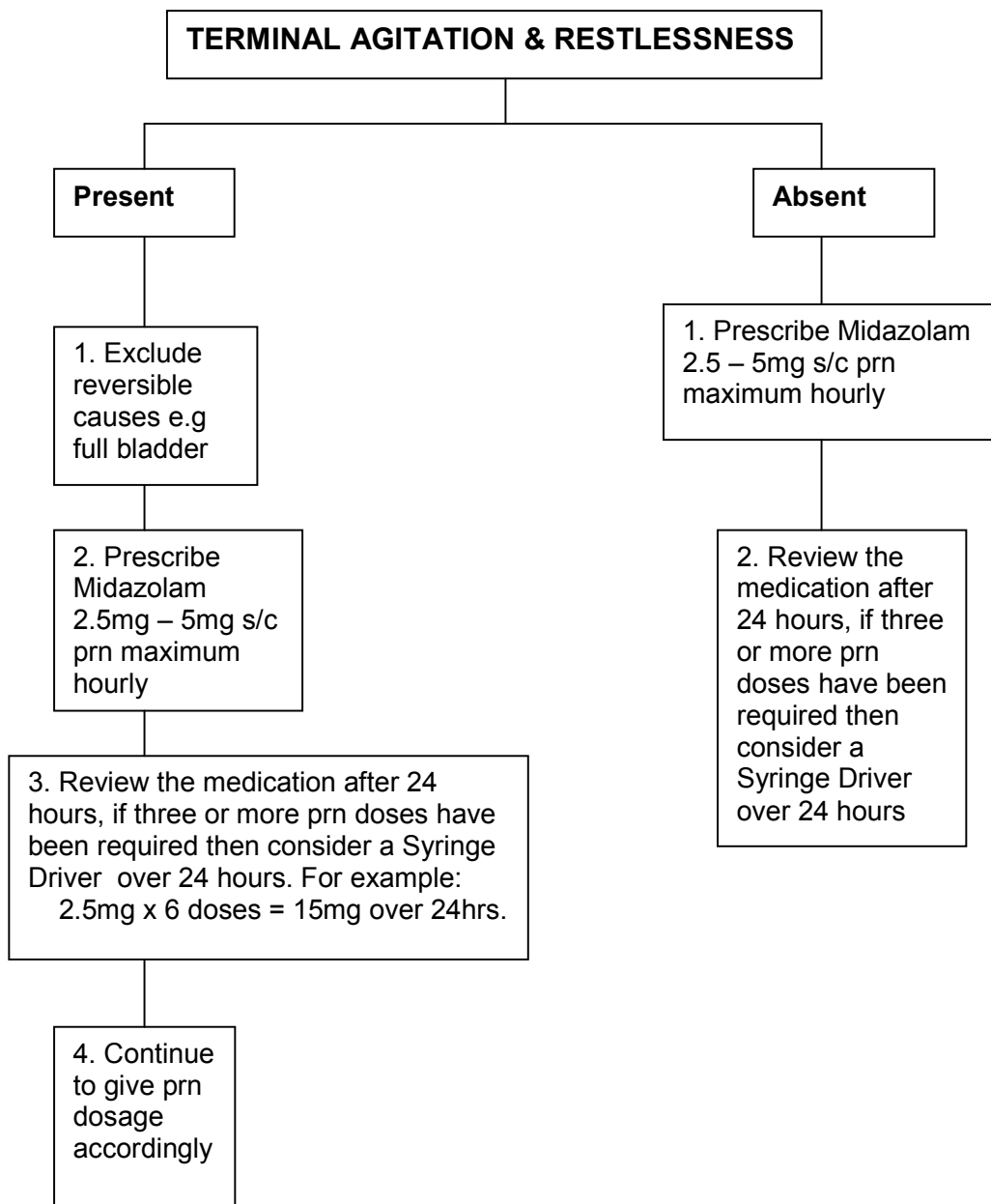
If symptoms persist or you need advice contact Earl Mountbatten Hospice 529511 or the Specialist Palliative Care Team St Mary's ext 4177 (534177 external)



Supportive information

1. Anticipatory prescribing will ensure that in the last hours / days of life there is no delay in responding to symptoms if they occur.
2. If no apparent benefit from 2 – 3 breakthrough doses, please contact the Specialist Palliative Care Team for advice.
3. Alternative antiemetics may be prescribed – seek advice from the Palliative Care Team.

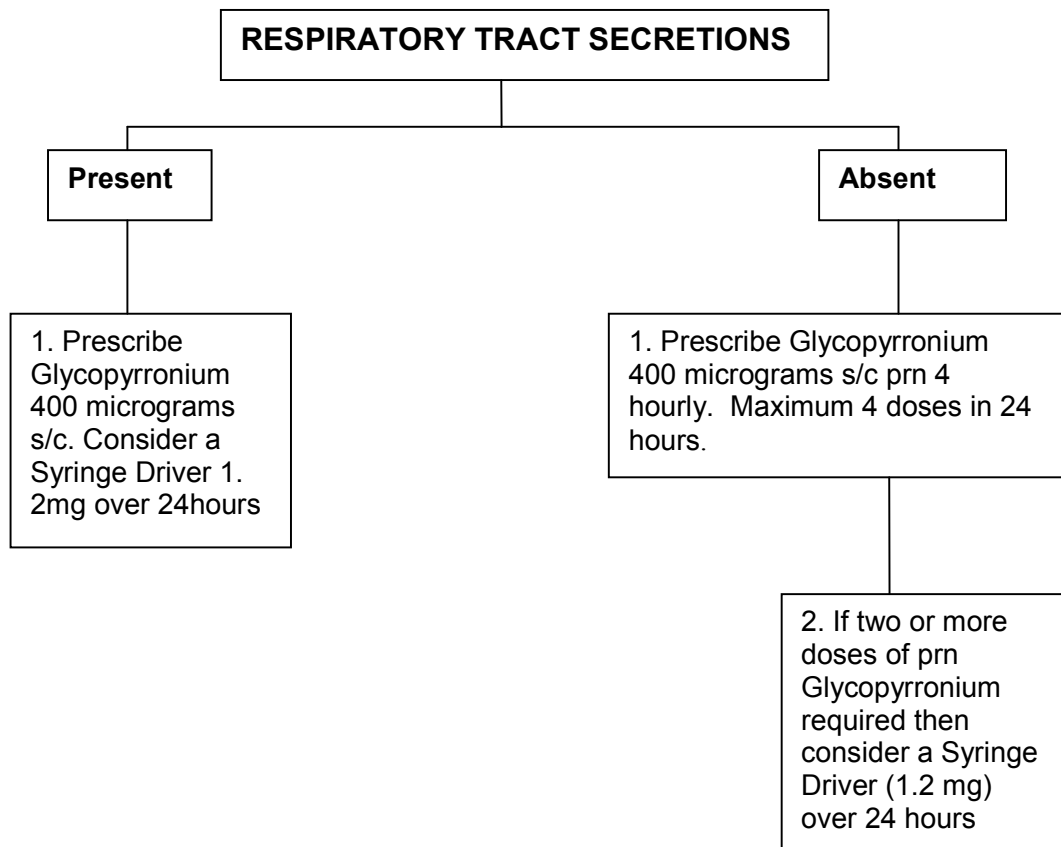
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Supportive information

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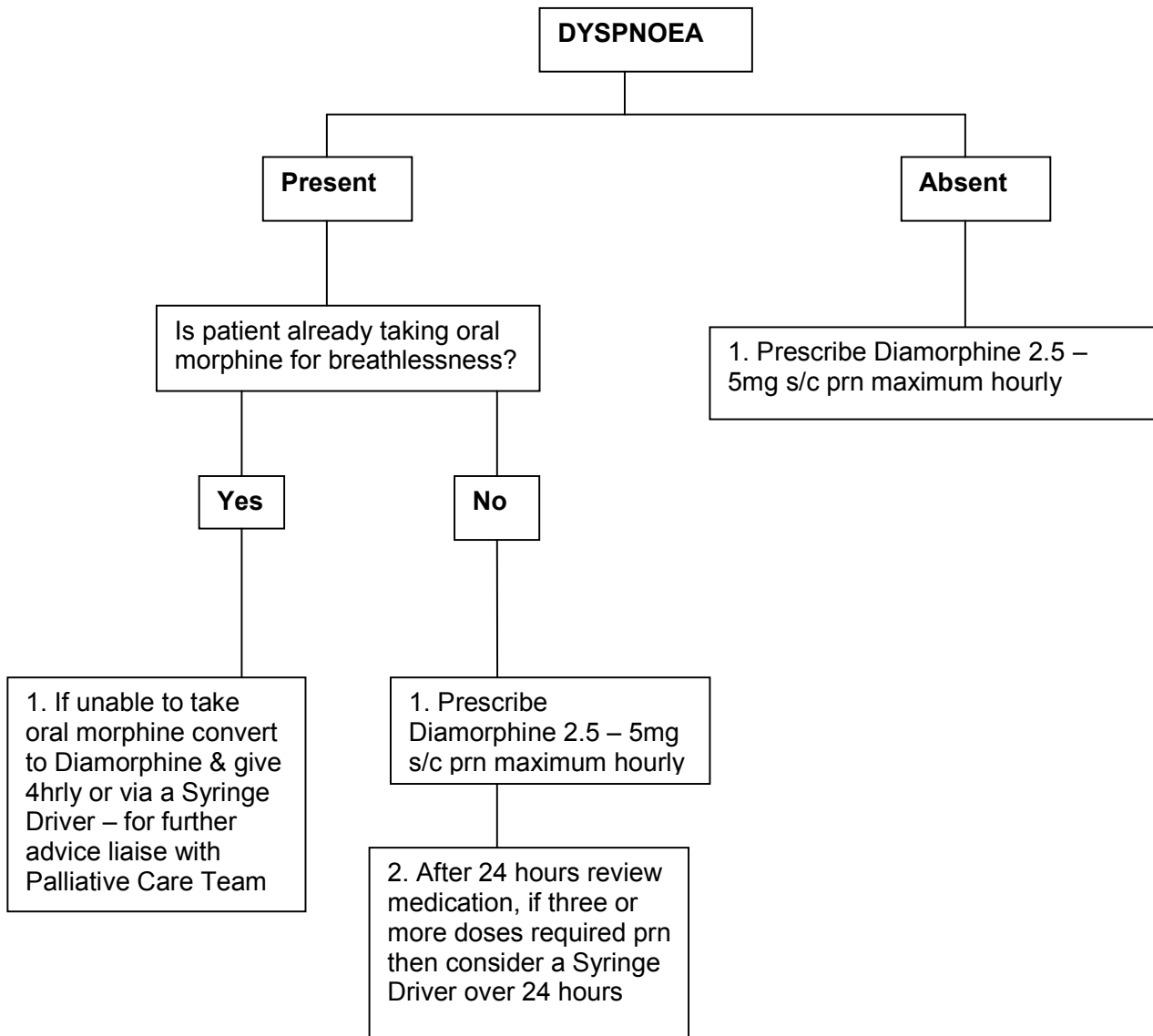
If symptoms persist or you need advice contact Earl Mountbatten Hospice 529511 or the Specialist Palliative Care Team St Mary's ext 4177 (534177 external)



Supportive information

1. Anticipatory prescribing will ensure that in the last hours / days of life there is no delay in responding to symptoms if they occur.
2. If Glycopyrronium 400 micrograms is unavailable, Hyoscine Hydrobromide may be used as an alternative (400 micrograms s/c bolus or 1.2mg over 24 hours via a syringe driver)

If symptoms persist or you need advice contact Earl Mountbatten Hospice 529511 or the Specialist Palliative Care Team St Mary's ext 4177 (534177 external)



Supportive information

1. Anticipatory prescribing will ensure that in the last hours / days of life there is no delay in responding to symptoms if they occur.
2. If no apparent benefit from 2 – 3 breakthrough doses, please contact the Specialist Palliative Care Team for advice.
3. If the patient is breathless and anxious consider Midazolam stat. 2.5mg s/c or sublingual Lorazepam 1mg stat.
4. Use non – pharmacological measures such as cool air from a fan, open window and a calming presence.

If symptoms persist or you need advice contact Earl Mountbatten Hospice 529511 or the Specialist Palliative Care Team St Mary's ext 4177 (534177 external)

Name..... NHS No..... Date..... Day 1 of commencing pathway

CODES (please enter in columns)	A = Achieved		V= Variance (not a signature)			
Section 2 Assessment of comfort measures	06.00	10.00	14.00	18.00	22.00	02.00
Pain Goal: Patient / resident is pain free <ul style="list-style-type: none"> • Verbalised by patient if conscious • Pain free on movement • Appears peaceful • Consider need for positional change 						
Agitation Goal: Patient / resident is not agitated <ul style="list-style-type: none"> • Patient does not display signs of delirium, terminal anguish, restlessness (thrashing, plucking, twitching) • Exclude retention of urine as cause • Consider need for positional change 						
Respiratory tract secretions Goal: Excessive secretions are not a problem <ul style="list-style-type: none"> • Medication to be given as soon as symptoms arise • Consider need for positional change • Symptom discussed with family /other 						
Nausea & vomiting Goal: Patient / resident does not feel nauseous or vomits <ul style="list-style-type: none"> • Patient verbalises if conscious 						
Dyspnoea Goal: Breathlessness is not distressing for patient <ul style="list-style-type: none"> • Patient verbalises if conscious • Consider need for positional change 						
Other symptoms (e.g. oedema, itch)						
Nutrition and Fluids Goal: Patient/ resident is assessed for ability to take oral food / fluids. <ul style="list-style-type: none"> • Record assessment as 'Achieved' if assessed for ability to tolerate diet / fluids • Record any diet / fluids taken on multidisciplinary progress page 						
Mouth care Goal: Mouth is moist and clean <ul style="list-style-type: none"> • See oral care policy • Mouth care assessment at least 4 hourly • Frequency of mouth care depends on individual need • Family/other involved in care given if desired 						
Urinary and Bowels Goal: Patient / resident is comfortable, clean and dry <ul style="list-style-type: none"> • Urinary catheter if in retention • Urinary catheter or pads, if general weakness creates incontinence 						
Pressure & Personal Care Goal: Patient / resident is comfortable and in a safe environment <ul style="list-style-type: none"> • Clinical assessment of skin integrity • Need for positional change for comfort every 4 hours • Personal hygiene (bed bath) daily • Eye care as required 						
Healthcare Professional / Responsible Person to initial each column following each period of care →						
Syringe Driver? If syringe driver in progress check at least 4 hourly and record on separate monitoring chart						
If you have charted "V" against any goal so far, please complete variance sheet page on pages 13 & 14						

VARIANCE RECORD DAY 1

Name.....

DOB.....

Date & Time	What Variance occurred	Action taken	Outcome	Sign

VARIANCE RECORD DAY 1

Name.....

DOB.....

Date & Time	What Variance occurred	Action taken	Outcome	Sign

Name.....NHS No.....Date.....Day 2 of commencing pathway

CODES (please enter in columns)	A = Achieved		V= Variance (not a signature)			
Section 2 Assessment of comfort measures	06.00	10.00	14.00	18.00	22.00	02.00
Pain Goal: Patient / resident is pain free <ul style="list-style-type: none"> • Verbalised by patient if conscious • Pain free on movement • Appears peaceful • Consider need for positional change 						
Agitation Goal: Patient / resident is not agitated <ul style="list-style-type: none"> • Patient does not display signs of delirium, terminal anguish, restlessness (thrashing, plucking, twitching) • Exclude retention of urine as cause • Consider need for positional change 						
Respiratory tract secretions Goal: Excessive secretions are not a problem <ul style="list-style-type: none"> • Medication to be given as soon as symptoms arise • Consider need for positional change • Symptom discussed with family /other 						
Nausea & vomiting Goal: Patient / resident does not feel nauseous or vomits <ul style="list-style-type: none"> • Patient verbalises if conscious 						
Dyspnoea Goal: Breathlessness is not distressing for patient <ul style="list-style-type: none"> • Patient verbalises if conscious • Consider need for positional change 						
Other symptoms (e.g. oedema, itch)						
Nutrition and Fluids Goal: Patient/ resident is assessed for ability to take oral food / fluids. <ul style="list-style-type: none"> • Record assessment as 'Achieved' if assessed for ability to tolerate diet / fluids • Record any diet / fluids taken on multidisciplinary progress page 						
Mouth care Goal: Mouth is moist and clean <ul style="list-style-type: none"> • See oral care policy • Mouth care assessment at least 4 hourly • Frequency of mouth care depends on individual need • Family/other involved in care given if desired 						
Urinary and Bowels Goal: Patient / resident is comfortable, clean and dry <ul style="list-style-type: none"> • Urinary catheter if in retention • Urinary catheter or pads, if general weakness creates incontinence 						
Pressure & Personal Care Goal: Patient / resident is comfortable and in a safe environment <ul style="list-style-type: none"> • Clinical assessment of skin integrity • Need for positional change for comfort every 4 hours • Personal hygiene (bed bath) daily • Eye care as required 						
Healthcare Professional / Responsible Person to initial each column following each period of care →						
Syringe Driver? If syringe driver in progress check at least 4 hourly and record on separate monitoring chart						
If you have charted "V" against any goal so far, please complete variance sheet page on pages 17 & 18						

VARIANCE RECORD DAY 2

Name.....

DOB.....

Date & Time	What Variance occurred	Action taken	Outcome	Sign

VARIANCE RECORD DAY 2

Name.....

DOB.....

Date & Time	What Variance occurred	Action taken	Outcome	Sign

Name.....NHS No.....Date.....Day 3 of commencing pathway

CODES (please enter in columns)	A = Achieved		V= Variance (not a signature)			
Section 2 Assessment of comfort measures	06.00	10.00	14.00	18.00	22.00	02.00
Pain Goal: Patient / resident is pain free <ul style="list-style-type: none"> • Verbalised by patient if conscious • Pain free on movement • Appears peaceful • Consider need for positional change 						
Agitation Goal: Patient / resident is not agitated <ul style="list-style-type: none"> • Patient does not display signs of delirium, terminal anguish, restlessness (thrashing, plucking, twitching) • Exclude retention of urine as cause • Consider need for positional change 						
Respiratory tract secretions Goal: Excessive secretions are not a problem <ul style="list-style-type: none"> • Medication to be given as soon as symptoms arise • Consider need for positional change • Symptom discussed with family /other 						
Nausea & vomiting Goal: Patient / resident does not feel nauseous or vomits <ul style="list-style-type: none"> • Patient verbalises if conscious 						
Dyspnoea Goal: Breathlessness is not distressing for patient <ul style="list-style-type: none"> • Patient verbalises if conscious • Consider need for positional change 						
Other symptoms (e.g. oedema, itch)						
Nutrition and Fluids Goal: Patient/ resident is assessed for ability to take oral food / fluids. <ul style="list-style-type: none"> • Record assessment as 'Achieved' if assessed for ability to tolerate diet / fluids • Record any diet / fluids taken on multidisciplinary progress page 						
Mouth care Goal: Mouth is moist and clean <ul style="list-style-type: none"> • See oral care policy • Mouth care assessment at least 4 hourly • Frequency of mouth care depends on individual need • Family/other involved in care given if desired 						
Urinary and Bowels Goal: Patient / resident is comfortable, clean and dry <ul style="list-style-type: none"> • Urinary catheter if in retention • Urinary catheter or pads, if general weakness creates incontinence 						
Pressure & Personal Care Goal: Patient / resident is comfortable and in a safe environment <ul style="list-style-type: none"> • Clinical assessment of skin integrity • Need for positional change for comfort every 4 hours • Personal hygiene (bed bath) daily • Eye care as required 						
Healthcare Professional / Responsible Person to initial each column following each period of care →						
Syringe Driver? If syringe driver in progress check at least 4 hourly and record on separate monitoring chart						
If you have charted "V" against any goal so far, please complete variance sheet page on pages 21 & 22						

VARIANCE RECORD DAY 3

Name.....

DOB.....

Date & Time	What Variance occurred	Action taken	Outcome	Sign

VARIANCE RECORD DAY 3

Name.....

DOB.....

Date & Time	What Variance occurred	Action taken	Outcome	Sign

Name..... NHS No..... Date.....

Section 3 Verification of death

Date of death Time of death..... Pupils fixed / dilated No
 spontaneous respirations

Persons present:

Notes:

Next of Kin (name)..... Present at death Notified of death

Signature / Designation

Confirmation of death by GP: Date..... Time..... GP

Coroners Case? (Mesothelioma / Industrial related disease) *Yes No

* Refer to Coroner's Officer

Explanation given to family

Care After Death	GP Practice contacted re patient's / resident's death Date __/__/__ Yes <input type="checkbox"/> No <input type="checkbox"/> If out of hours contact on next working day. Message can be left with receptionist
	Procedures for laying out followed according to care home policy Yes <input type="checkbox"/> No <input type="checkbox"/> Carry out specific religious / spiritual / cultural needs Specific requests
	Procedure following death discussed with family and carried out Yes <input type="checkbox"/> No <input type="checkbox"/> For Cremation <input type="checkbox"/> For Burial <input type="checkbox"/> Name of Funeral Director: Discuss viewing of body as appropriate Family aware cardiac devices (ICD's) or pacemaker must be removed prior to cremation Post mortem discussed as appropriate
	Policy followed for patient's / resident's valuables & belongings Yes <input type="checkbox"/> No <input type="checkbox"/> Belongings and valuables are signed for by identified person Property packed for collection in an appropriate and sensitive way Valuables listed and stored safely List any valuables left on resident / patient
	Notification of death form to be completed and sent to CSCI Yes <input type="checkbox"/> Death entered in patients register Yes <input type="checkbox"/> Necessary documentation & advice is given to the appropriate person Yes <input type="checkbox"/> No <input type="checkbox"/> 'What to do after death' booklet given (DHSS) Registrars information leaflet (to arrange a time to register death) Pension book returned to DHSS
	Inform other relevant professionals of patient's / resident's death Yes <input type="checkbox"/> No <input type="checkbox"/> Consider list below Care Manager Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Continuing Care Co-ordinator Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> District Nurse Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Marie Curie Co-ordinator Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Social services Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Intermediate Care Co-ordinator Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Macmillan Team Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Hospice Extended Care Team Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Other services / professional contacted i.e. Community Matron, Heart Failure Nurse Specialist. Please state.....
	Health Care Professional / Responsible Person Signature Date

References

Ellershaw J.E. & Wilkinson S (2003) Care of the dying: A pathway to excellence. Oxford University Press.

Gibbs M. (2003) A guide to equivalent doses for opioid drugs. 2nd edition 2006
www.palliativedrugs.com/download/GUIDE%20TO%20EQUIVALENT%20OPIOID%20DOSE%20Updated.pdf (accessed 3rd July 2008)