NRAHS PALLIATIVE CARE MORPHINE VARIABLE DOSE CHART

Explanatory notes only – PLEASE READ FULL GUIDELINES

- This morphine variable dose chart has been developed to facilitate safe morphine administration and improved pain control for palliative care patients.
- The chart is applicable to opioid naïve patients and those patients on opioids who have severe uncontrolled pain.
- Normal release morphine is prescribed 4 hourly and extra doses are called "breakthroughs".
- The chart is used so that the ward nurse can assess the patient at least 4 hourly and titrate the morphine dose (up or down) without the need for the doctor to change the morphine order.
- When the pain is stable, the 4 hourly morphine is converted to a sustained-release opioid for maintenance. (See Opioid Conversion Table on Back Page)

1. ROUTE
- Morphine is always prescribed orally.
- If the oral route is not available, then the subcutaneous route is used.
- The subcutaneous dose is half the oral dose e.g. 10mg oral morphine = 5mg sc morphine.

2. DOSE
- There is no standard dose of morphine
- If the patient is not on an opioid then 5-10mg orally is a reasonable starting dose.
- If the patient is frail or elderly, 2.5mg orally is a reasonable starting dose
- If the patient is already on an opioid use the conversion chart on the back page to calculate the 4 hourly starting dose.
- The dose is then adjusted over 24 – 48hrs according to patient response.
- If the patient is on more than 100mg morphine 4 hourly, consult the palliative care service for advice

The recommended sequence of doses is:

2.5mg – 5 – 7.5 – 10 – 15 – 20 – 30 – 40 – 60 – 80 – 100 – 120mg 4 hrly.

The dose should be increased if
- **The patients pain consistently returns before the next regular dose is due**
- **The patient's pain score remains high**
- **3 or more breakthroughs are required in 24 hours**

The dose should be decreased if
- **The patient is pain free but drowsy**

4. BREAKTHROUGH DOSE
- A breakthrough dose is given **at any time** if pain occurs, irrespective of the regular dose.
- It is always the same as the 4 hourly dose.

6. MAXIMUM DOSE
- This is the maximum regular 4 hourly dose that the nurse can give.
- A recommended maximum dose is approximately 3x the starting dose
- If the patient is in pain and requires a larger dose, the doctor must review the patient and write a new morphine variable dose chart.

7. APERIENTS
- Regular aperients **must** be charted and titrated according to patient response
  e.g .Movicol 1-3/d or Docusate & Senna 2 bd
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8. ANTI-EMETICS
- Should be charted as a PRN order, e.g. metoclopramide 10mg qds

Morphine is not a sedative and can cause severe confusion, agitation and distress if given as a sedative in the terminal phase. If sedation is necessary, a benzodiazepine or psychotropic drug should be considered and consultation with the palliative care service is advised.

NRAHS PALLIATIVE CARE MORPHINE VARIABLE DOSE CHART

U/R NAME:	ALLERGIES

Route: Oral / Subcutaneously (10mg oral = 5mg subcutaneous)

Dose: …… mg every 4 hours and as required (indicate on chart if dose is a breakthrough dose)

Increase dose if 3 (three) or more breakthrough doses are required in a 24 hour period or pain score is consistently high.
Decrease dose if patient is pain free but drowsy.
The following dose sequence is recommended when making dose adjustments:

2.5 - 5 - 7.5 - 10 - 15 - 20 - 30 - 40 - 60 - 80 - 100 - 120 - 160 - 200

Maximum Dose before contacting MO: ……mgs

Doctor's Signature: …… Date: …. / …. / ….

Print Name: ……

Ensure aperients and anti-emetics are prescribed.

PAIN ASSESSMENT CHART

Pain Score 0 (No pain) → → → 10 (Worst pain imaginable)

Mental State: A (alert), D (drowsy), S (sleeping), C (confused) U (unrousable)

DATE	TIME	DOSE	ROUTE	PAIN SCORE 0-10	MENTAL SCORE A,D,S, C,U	PAIN SITE	BREAK THROUGH	COMMENTS	SIGN	PAIN LEVEL ½ HOUR AFTER MEDICATION

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DATE	TIME	DOSE	ROUTE	PAIN SCORE 0-10	MENTAL SCORE A,D,S, C,U	PAIN SITE	BREAK THROUGH	COMMENTS	SIGN	PAIN LEVEL ½ HOUR AFTER MEDICATION

OCT 2004 Northern Rivers Area Health Service/Palliative Care Pain Management Guidelines

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OPIOID CONVERSION TABLES

APPROXIMATE EQUIVALENT ORAL DOSES

10mg oral morphine = 2mg Hydromorphone
6mg Oxycodone
40mg Tramadol
80mg Pethidine
80mg Codeine
140mg Dextropropoxyphene

N.B. 1 Panadeine Forte = 4mg oral morphine (Approximately)

SUSTAINED RELEASE PREPARATIONS

Opioid	Trade Name	Unit Doses (mg)	Frequency
MORPHINE	MS Contin	5, 10, 15, 30, 60, 100, 200	12 hrly
	MS Contin Suspension	20, 30, 60, 100, 200	12 hrly
	Kapanol	10, 20, 50, 100	12 hrly or 24 hrly
	MS Mono	30, 60, 90, 120	24 hrly
OXYCODONE	Oxycontin	5, 10, 20, 40, 80	12 hrly
FENTANYL	Durogesic	25mcg/hr, 50mcg/hr, 75mcg/hr, 100mcg/hr	Every 72 hrs

SLOW RELEASE EQUIVALENT

4 hourly dose of Morphine		12hrly Morphine MS Contin or Kapanol	24hrly Morphine MS Mono or Kapanol	12hrly Oxycodone (OxyContin)	Fentanyl (mcg/hr)
S/C	ORAL				
2.5	5mg	15	30	10	Not recommended
5	10	30	60	20	25
7.5	15	45	90	30	25
10	20	60	120	40	25
15	30	90	180	60	50
20	40	120	240	80	75
25	50	150	300	100	75
30	60	180	360	120	100
40	80	240	480	160	125
50	100	300	600	200	175

EXAMPLE If the patients pain is controlled on 20mg oral morphine every 4 hours, convert to

- MS Contin 60mgbd
- Kapanol 60mg bd
- MS Mono 120mg daily
- OxyContin 40mg bd
- Fentanyl Patch 25mcg/hr / 72 hours

FENTANYL PATCH CONVERSION

4 hourly dose Oral Morphine	24hr Oral Morphine		Fentanyl Patch mcg/hr
10 – 20mg	60 – 134	→	25
25 – 35mg	135 – 224	→	50
40 – 50mg	225 – 314	→	75
55 – 65mg	315 – 404	→	100
70 – 80mg	405 – 494	→	125
85 – 95mg	495 – 584	→	150

Reference Palliative Care Formulary 2nd Edition 2002, Radcliffe Press