Adult Policy for Strong Opioid Dosing (Acute Pain) – Intermittent Oral and Subcutaneous Management

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Policy/Purpose

To ensure safe administration of opioids the following policy must be adhered to

Scope

CDHB inpatient services Registered Nurses/Midwives, Approved persons Prescribers/Medical practitioners

Associated documents

- Adult guidelines for intermittent opioid administration lanyard ref. 210
- Drug Treatment Sheet/MedChart
- Notes on Injectable Drugs

- Area specific Fluid/Medication chart
- The Hospital HealthPathways Acute Pain in Adults Naxolone
- Adult Observation Chart C280010/Patient Track
- Sedation score available on the Adult Observation Chart or Patient Track
- <u>Student Nurse Midwife Responsibilities with Fluid and Medication</u>
 <u>Management</u>
- Subcutaneous Fluid And Medication Policy

Requirements for prescribing/administering opioid

Before opioid administration, ensure that simple analgesics are being administered e.g. paracetamol, NSAIDS (if not contraindicated)

The recommended opioid is morphine, unless contraindicated e.g. known allergy or renal impairment

- The RN/RM/RMO must be familiar with where naloxone is stored on the ward
- The patient/family/whanau should be briefed on the benefits and risks of opioids, and be given education on adverse effects.
- Intermittent opioids should only be given by one route at any time. In situations of severe acute pain, intravenous administration may be more appropriate.

Please Note:

- Patients who are on regular opioids on admission (i.e. for cancer or chronic pain) are likely to need an individualised analgesic regime with the appropriate teams' assistance e.g Palliative Care Team and/or the Acute Pain Management Service in your facility or contact the patients RMO/SHO.
- For Burwood patients, if assistance is still required, contact the Burwood APMS or the on call RMO/SHO.
- For Ashburton patients, if assistance is required, contact the patients RMO/SHO in the first instance.

Patient Risk Factors

- Respiratory disease including obstructive sleep apnoea
- Frailty
- Receiving other sedative medication(s)
- Impaired renal function, particularly in the elderly

- Central Nervous System depression
- Raised intracranial pressure
- Bradycardia arrhythmias
- Impaired liver function

Oral dosing

Morphine is the recommended drug of choice for oral dosing unless there is a contraindication for its use

Recommended dosing according to age

These doses are a guide for the use of Immediate Release (IR) morphine and oxycodone in acute pain. Use clinical judgement when prescribing.

Considerations.

- Initial dosing for the opioid naïve patient, begin at the lower end of the dose range.
- Age is the best dose predictor. Lower doses are usually required with increasing age.
- Renal impairment morphine may be inappropriate. Consider a longer dosing interval.
- Weight dose adjustment may be required at extremes of body weight. Eg underweight patients may require less opioid, overweight patients may require more opioid.
- General physical condition less opioid is usually required if frail or poor general condition.
- Pre-existing opioid use opioid tolerance occurs with long term opioids, larger doses are often required.

Morphine Oral *(1 st line)		Oxycodone Oral* (2 nd line)	
Age	Suggested dose every two hours PRN	Age	Suggested dose every two hours PRN
16 - 39	10 - 30 mg	16 - 39	5 - 15 mg
40 - 59	10 - 20 mg	40 - 59	5 - 10 mg
60 - 69	5 - 15 mg	60 - 69	2.5 - 7.5 mg
70 - 85	5 - 10 mg	70 - 85	2.5 - 5 mg
85+	2.5 - 5 mg	85 +	2.5 mg

*immediate release.

Adult Policy for Intermittent Oral Opiod Dosing

Please note: The total morphine/oxycodone dose in the 24 hours following any dose will be limited to 8 times the upper dose of the prescribed range

Subcutaneous dosing

Considerations

- Initial dosing for the opioid naïve patient, begin at the lower end of the dose range.
- Age is the best dose predictor. Lower doses are usually required with increasing age.
- Renal impairment morphine may be inappropriate. Consider a longer dosing interval.
- Weight dose adjustment may be required at extremes of body weight. Eg underweight patients may require less opioid, overweight patients may require more opioid.
- General physical condition less opioid is usually required if frail or poor general condition.
- Pre-existing opioid use opioid tolerance occurs with long term opioids, larger doses are often required.

Morphine Subcutaneous		Fentanyl Subcutaneous	
Age	Suggested dose every two hours PRN	Age	Suggested dose every two hours PRN
16 - 39	5 – 10 mg	16 - 39	50 – 100 micrograms
40 - 59	4 – 7.5 mg	40 - 59	40 – 75 micrograms
60 - 69	2.5 – 5 mg	60 - 69	25 – 50 micrograms
70 - 85	1.5 – 3 mg	70 - 85	15 – 30 micrograms
85+	1 – 2 mg	85 +	10 – 20 micrograms

Please note: The total morphine/fentanyl dose in the 24 hours following any dose will be limited to 8 times the upper dose of the prescribed range

Observations and Monitoring for both modalities (oral and sub cut)

Baseline observations

Document baseline observations to inform a NZ EWS and the patient's sedation score, pain score on the Adult Observation Chart/Patient Track.

Observation criteria for administration

All of the following observation criteria must be met before the patient receives any opioid.

- Respiratory rate at or above 12 respirations per minute
- Alert or Visual stimulus (AVPU scale)
- Sedation score of 0 or 1

Calculate and document a NZ EWS, and action as per NZ EWS management pathway.

Monitoring

Post administration assessment and observations will be performed and documented at

- One hour post administration of the oral/sub cut opioid.
- When clinically indicated due to concerns.
- These observations must include sedation level, respiratory rate, and pain score.

Adverse Effects/Precautions

- Respiratory depression (Respiratory rate of less than 9 bpm is a potentially life threatening adverse effect.)
- Sedation score of 2 or more.
- Heart rate less than 50 beats per minute.
- Hypotension- blood pressure of less than 100mmHg systolic or drop of greater than 20mmHg systolic BP.
- Oxygen saturations below 94% with supplementary oxygen.
- Utilise Naloxone and Oxygen as prescribed
- Where treatment is required for adverse effects manage accordingly and document adverse effect, treatment and outcome

Measurement and Evaluation

- Acute Pain Management Service (APMS) review of individual Patients
- Incident management proces

References

Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine

(4th Ed. 2015) Acute Pain Medicine Scientific Evidence.

Mcintyre P.E. Schug S.A. Acute Pain Management. A Practical Guide (4th Ed 2015)

Policy Owner	Acute Pain Management Service, Nurse Consultant.
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