MEDICATION GUIDELINE

Oral Opioid Prescribing in Acute Non Cancer Pain

Disclaimer: This document does not override decision based on clinical judgement and experience of the prescriber.

AREAS APPLICABLE

All Areas

INTRODUCTION

Opioid analgesia remains one of the primary pharmacologic interventions for managing pain in hospitalised patients; however, as with any medication, opioids can cause adverse effects. Unintended, advancing sedation and respiratory depression are among the most serious.

This guideline is intended to provide guidance and comparative information relating to oral opioids in acute non-cancer pain. Formulations other than oral opioids are available such as patches and injections which may also be appropriate but are not covered in this guideline.

For complex cases or for specific information relating to acute pain, chronic pain or palliative care, referral should be made to the appropriate service. This guideline does not replace the need for referral to and expert guidance from the acute and chronic pain services and the palliative care team.

LEGISLATIVE REQUIREMENTS

It is a legal requirement that all disciplines that prescribe or administer medications comply with the Poisons Act 1964, Poison Regulations 1965 Poison Amendment Regulation 2010 and the Pharmacy Act 2010. Prescribing should also be as per the SCGH Medication Formulary and associated restrictions and adherence to relevant hospital guidelines is recommended.

EQUIANALGESIC DOSES OF ORAL OPIOIDS 1,2,3

<table>
<thead>
<tr>
<th>DRUG</th>
<th>APPROXIMATE ORAL EQUIANALGESIC DOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>10mg</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>2mg</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>5mg</td>
</tr>
<tr>
<td>Tapentadol</td>
<td>25mg Note: the lowest available strength of tapentadol SR is 50mg</td>
</tr>
<tr>
<td>Tramadol</td>
<td>50mg</td>
</tr>
<tr>
<td>Buprenorphine sublingual</td>
<td>200microgram sublingually</td>
</tr>
<tr>
<td>Methadone</td>
<td>Conversion is complex and requires specialist advice</td>
</tr>
</tbody>
</table>

This table is a guide only.

Patients vary in their response to different opioids. When rotating from one opioid to another, approximately half of the equianalgesic dose should be trialled initially with PRN rescue doses charted. Following drug and dose changes, close assessment and monitoring of the patient should follow.
DECISION TO PRESCRIBE ORAL OPIOIDS

Assess pain - refer to the Pain Assessment and Management Algorithm

Have non opioid agents been considered?

Paracetamol

- Paracetamol 1g qid for mild pain (maximum 4g in 24 hours)\(^4\)
- Note: Dose adjustment is necessary if patient weighs ≤50kg. 15mg/kg/per dose is recommended\(^4, 5\)
- Caution in hepatic impairment \(^4\)
- Available at SCGH in oral (IR and SR), liquid, effervescent, rectal and IV formulations. IV Paracetamol is restricted at SCGH to initiation by the APS.
- If pain requirements increase and additional agents are required regular paracetamol should be continued. Multimodal analgesia provides additive or synergistic effects and reduces occurrences of opioid related adverse effects.\(^5\)

Non Steroidal Anti-inflammatory Drugs (NSAIDs)

There are multiple NSAIDs, selective and non-selective, available. Listed below are two examples.

- Celecoxib (selective) 100mg bd with food for 48 hours then prn
- Ibuprofen (non-selective) 400mg tds with food for 48 hours then prn
- Precautions: Renal impairment, cardiovascular risk factors, history of GI bleed/GI ulcers, aspirin sensitive asthma (note this is not common) \(^7, 8\)
- Considerations: NSAIDs inhibit mucosal prostaglandin production which can increase the risk of mucosal injury. Risk factors include duration of treatment, age (>65), history of peptic ulcer disease, type of NSAID and use of concurrent medication known to increase risk of mucosal injury (e.g. corticosteroids).\(^7\) In practice it is common to prescribe a proton pump inhibitor concurrently with NSAIDs if risk factors are present. This may be considered however evidence is limited.
- Note: Non-selective NSAIDs are more likely to cause adverse gastric and renal effects in elderly patients. Selective NSAIDs are less likely to cause gastrointestinal side effects and do not affect platelet aggregation. The risk of impairing renal function and exacerbation of heart failure are similar for selective and non-selective NSAIDs.\(^8\)

Tramadol Immediate Release

- Tramadol is a weak opioid and may be considered in addition to the above as a 2nd line agent. For details see Table of Oral Opioid Drugs below.

When prescribing oral opioids the following require consideration:

- Age
- Renal function
- Opioid tolerance, including previous exposure or naivety to opioids
- Type of pain (Acute, Chronic, Cancer or Neuropathic – see WATAG Guidelines for the treatment of neuropathic pain)
- Intensity of pain
- Assess whether the oral route is appropriate
- Other prescribed medications e.g. caution with multiple CNS depressants
- Caution in patients with - ileus, bowel obstruction, respiratory depression, severe COAD or asthma, pregnancy and breastfeeding

Some adverse effects of opioids that require careful monitoring include but are not limited to:

- Respiratory depression, sedation, constipation, nausea, urinary retention, pruritus and increased risk of falls
- NOTE: Respiratory depression is usually preceded by increasing sedation which may be a sign of impending ventilatory impairment – a key sign is inability to stay awake when no longer verbally or physically stimulated – urgent medical review should be sought

If pain management is complex seek advice from the appropriate service

- Acute Pain Service Page 4120 (0800-1700 Mon-Fri, 0800-1200 Sat)
- Chronic Pain Service Page 3429
- Palliative Care Team Page 4648 Extension 2551
TABLE OF ORAL OPIOID DRUGS

Note the doses recommended in the table below are for opioid-naïve patients. Higher doses may be required in those who are opioid-tolerant. Advice should be sought if required.

<table>
<thead>
<tr>
<th>Oral Opioids - Immediate Release Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple prn opioids should be avoided. Choose an opioid that would be most appropriate for the patient based on considerations mentioned above and within the table.</td>
</tr>
</tbody>
</table>

**Tramadol**

(Tramedo ®, Lodem®, Zydol ® Tramal ®)

<table>
<thead>
<tr>
<th>Indication:</th>
<th>Moderate to severe pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions:</td>
<td>Caution in patients &gt;65yr</td>
</tr>
<tr>
<td></td>
<td>Caution in patients with seizure disorder</td>
</tr>
<tr>
<td></td>
<td>Caution in patients prescribed other serotonergic agents</td>
</tr>
<tr>
<td></td>
<td>Caution in patients with impaired renal function or renal failure</td>
</tr>
<tr>
<td></td>
<td>Caution in patients with advanced liver cirrhosis</td>
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<tr>
<td></td>
<td>Do not use within 14 days of a Monoamine Oxidase Inhibitor (MAOI) eg. Phenelzine, Tranylcypromine, moclobemide</td>
</tr>
</tbody>
</table>

| Common starting dose: | 50mg up to every 2 hours prn (Max dose 400mg in 24 hours unless under specialist advice) |
| Consider extending dosing interval in patients with renal impairment |

**Buprenorphine sublingual**

(Temgesic ®)

<table>
<thead>
<tr>
<th>Indication:</th>
<th>Short term moderate to severe pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions:</td>
<td>Caution in patients &gt;65 years. See dosing recommendations</td>
</tr>
<tr>
<td></td>
<td>Caution in patients with severe hepatic dysfunction</td>
</tr>
</tbody>
</table>

| Common starting dose: | 200-400 microgram subling 2 hourly prn |
| Patients >65 years of age consider extending dosing interval |

**Hydromorphone**

(Dilaudid ®)

<table>
<thead>
<tr>
<th>Indication:</th>
<th>Moderate to severe pain</th>
</tr>
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<tbody>
<tr>
<td>Precautions:</td>
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</tr>
</tbody>
</table>

| Common starting dose: | 2-4mg 2 hourly prn |
| >65 years old 1-2mg 2 hourly prn |

**Important points:**

- Schedule 8
- Formulation must be indicated on prescription
- NON-PBS therefore it is preferable for discharge prescriptions to be dispensed at SCGH. After hours prescriptions must be obtained from a community pharmacy
- If patients have their buprenorphine prescription dispensed at a community pharmacy they may experience difficulty obtaining supply and will need to pay the full unsubsidised price.
- Subutex® and Suboxone® cannot be prescribed for pain
- Tablets cannot be chewed or swallowed
- Recommended discharge quantity 10-20 tabs
- Available as;
  - Immediate release tablets 2mg, 4mg and 8mg x 20
  - 1mg/ml liquid x 473mL
- Maximum discharge quantity: 20 tablets or for liquid consult your ward pharmacist for advice on quantity. This will require calculating likely number of doses required until GP review. Prescribing full 473mL bottle as per PBS may compromise patient safety.

### Codeine (Actacode ®)

- Generally not recommended for pain relief at SCGH. Codeine may be indicated for other uses such as cough suppression or to reduce bowel motility.

### Oxycodone (Endone ®, Oxynorm®)

- **Indication:**
  - Moderate to severe pain

- **Precautions:**
  - Caution in severe renal impairment
  - Caution in severe hepatic impairment
  - Known high potential for abuse

- **Common starting dose:**
  - 5mg-10mg 4-6 hourly prn
  - Elderly patients: 2.5mg 4-6 hourly prn

- **Important points:**
  - Schedule 8
  - Form must be indicated on prescription
  - Available as;
    - 5mg/mL liquid x250mL
    - 5mg tablets x 20
    - 10mg and 20mg capsules x 20
  - Maximum discharge quantity: 20 tablets, 20 capsules or 250mL liquid. If 250mL is not required a lesser quantity may be prescribed.
  - Note: Oxycodone is no longer recommended as a first line opioid at SCGH due to increased potential for abuse. Exemptions may include cancer pain and elderly patients.

### Morphine (Sevredol®, Anamorph®, Ordine ®)

- **Indication:**
  - Severe pain

- **Precautions:**
  - Caution in elderly patients
  - Caution in severe hepatic impairment
  - Caution in severe renal impairment
  - Caution in drug addiction

- **Common starting dose:**
  - 5-20mg every 4 hours prn

- **Important points:**
  - Schedule 8
  - Form must be indicated on prescription
  - Available as;
    - liquid 2mg/mL, 5mg/mL and 10mg/mL x 200mL
    - tablets 10mg, 20mg, 30mg x 20
  - Maximum discharge quantity 20 tablets or 200mL liquid. If 200mL is not required a lesser quantity may be prescribed.
  - Not considered a first line opioid at SCGH
  - Increased potential for abuse

### Methadone (Physeptone ®)

- Methadone for pain relief should only be prescribed under the advice of the acute pain, chronic pain or palliative care services.

### Oral Opioids - Slow Release Formulations

#### Tramadol SR

- **Indication:**
  - Moderate to severe pain

- **Precautions:**
  - Not recommended in patients with renal impairment
  - Caution in patients >65yr
  - Caution in patients with seizure disorder
  - Caution in patients with advanced liver cirrhosis
  - Caution in patients prescribed other serotonergic agents, especially the elderly and in the presence of other risk factors e.g. renal impairment/failure
- Do not use within 14 days of a Monoamine Oxidase Inhibitor (MAOI) eg. Phenelzine, Tranylcypromine, moclobemide

Common starting dose:
- 50-100mg BD (Maximum 400mg in 24 hours unless under specialist advice)

Important points:
- Schedule S4R
- Also has effects on serotonergic and noradrenergic systems. Therefore take care when administering with other serotonergic agents
- *Caution when prescribing* Do not confuse SR and XR Tramadol SR is the only formulation available at SCGH. Tramadol XR (Durotram XR ®) is another formulation available in the community. Tramadol XR (Durotram XR ®) is formulated for 24-hr dosing therefore must not be confused with Tramadol SR which is formulated for 12-hr dosing.
- Tablets should not be halved, crushed or chewed
- Maximum discharge quantity: 20 tablets as per PBS

**Tapentadol SR (Palexia SR ®)**

Indication:
- Moderate to severe chronic pain

Precautions:
- Not recommended in severe renal impairment
- Not recommended in severe hepatic impairment
- Do not use within 14 days of a Monoamine Oxidase Inhibitor (MAOI) eg. Phenelzine, Tranylcypromine, moclobemide
- Caution in patients with seizure disorder
- Caution in patients >65yrs
- Weak serotonin reuptake inhibitor → precaution with patients prescribed other serotonergic agents

Common starting dose:
- 50mg BD
- No dose adjustment necessary for mild to moderate renal impairment
- In patients with moderate hepatic impairment dose once daily only

Important points:
- Schedule 8
- Tapentadol’s analgesic effect is due to both mu-opioid receptor agonism and noradrenaline reuptake inhibition.
- Tapentadol has a weak effect on serotonin reuptake therefore take care when prescribing in combination with other serotonergic agents.
- Tapentadol is a relatively new opioid. It may play a role in reducing use of oxycodone and other agents that have a high abuse potential, however, there is little evidence to support reduced abuse with tapentadol. Careful monitoring is required.
- The conversion ratio between Oxycodone and Tapentadol is 1 : 5
- Tablets cannot be halved, crushed or chewed.
- Maximum discharge quantity: 28 tablets as per PBS

**Oxycodone SR (Oxycontin ®, Targin ® )**

Indications:
- Moderate to severe chronic pain

Precautions:
- Known high potential for abuse
- Caution in severe renal impairment
- Caution in severe hepatic impairment

Common starting dose:
- Oxycodone SR 10mg BD
- Oxycodone/Naloxone SR 5/2.5mg – 10/5mg BD

Important points:
- Schedule 8
- Also comes in a formulation with naloxone (Targin ®) which was developed to reduce constipation. Naloxone antagonises opioid receptors in the gut but has a very low oral bioavailability therefore is not likely to have a systemic effect. The presence of naloxone also makes it less likely to be injected by opioid abusers.
- Oxycontin ® is now available as Oxycontin tablet Reformulated ® which
forms a thick gel if mixed with water to reduce diversion. Oxycontin Reformulated ® is not available in a 5mg dosage form as Oxycontin ® was therefore the lowest dosage form available is 10mg. Tablets cannot be halved, crushed or chewed. Maximum discharge quantity: 28 tablets as per PBS. Note: Oxycodone is no longer recommended as a first line opioid at SCGH due to increased potential for abuse. Exemptions may include cancer pain and elderly patients.

| Hydromorphone SR (Jurnista ®) | Indications:  
| | • Moderate to severe chronic pain |
| | Precautions:  
| | • Caution in elderly patients  
| | • Caution in moderate to severe renal impairment  
| | • Caution in moderate to severe hepatic impairment |
| | Common starting dose:  
| | • 4-8mg every 24 hours |
| | Important points:  
| | • Schedule 8  
| | • Tablets cannot be halved, crushed or chewed |
| | Maximum discharge quantity: 14 tablets as per PBS |

| Morphine SR (MS Contin ®, Momex SR ®, Kapanol MR ®) | Indications:  
| | • Chronic severe pain |
| | Precautions:  
| | • Caution in elderly patients  
| | • Caution in severe renal impairment  
| | • Caution in severe hepatic impairment  
| | • Caution in opioid addiction |
| | Common starting dose:  
| | • 5-10mg BD |
| | Important points:  
| | • Schedule 8  
| | • Tablets/capsules cannot be halved, crushed or chewed |
| | Maximum discharge quantity: 28 tablets as per PBS  
| | • Not considered a first line opioid at SCGH  
| | • Increased potential for abuse |

Note: Available forms and strengths relate to those available at SCGH. Other strengths and formulations may be available in the community.

### SUPPORTIVE CARE

<table>
<thead>
<tr>
<th>Adverse Effect</th>
<th>Suggested agent and dose</th>
</tr>
</thead>
</table>
| Aperients | Opioids impair gastric motility due to the effects on opioid receptors in the gut. Aperients should be prescribed before constipation becomes an established problem.  
| | Caution in patients having bowel surgery – aperients may be contraindicated. Seek specialist advice.  
| | Coloxyl and Senna® (docusate/senna) 50/8mg  
| | 2 tablets daily  
| | Lactulose 15mL daily  |
| Anti-emetics | Nausea and vomiting can commonly occur. Prescribe a prn antiemetic for all patients on opioid therapy.  
| | Metoclopramide 10mg tds prn |

### PRESCRIBING TIPS

S8 prescribing on the National Inpatient Medication Chart (NIMC)
Remember to always indicate;  
- Generic drug name  
- Strength (If a liquid is prescribed indicate strength in mg per mL)  
- Formulation (tick the modified release formulation box if necessary)  
- Dose  
- Frequency  
- Timing interval and maximum dose if prn  
- Full name and signature under every S8 order is a legal requirement
S8 prescribing on discharge prescriptions
The following are extra requirements for S8 discharge prescriptions

- The patient’s name must be written in the prescriber’s handwriting in addition to placing a patient’s addressograph on each copy of the discharge prescription
- Precise directions for use including dose, frequency and dosing interval
- No more than one schedule 8 drug may be written on the same prescription unless they are multiple forms of the same drug
- A schedule 8 drug cannot be written on the same prescription as a S4 medication or medication within other schedules

Other tips

- Ensure a reasonable quantity is prescribed for pain relief until follow up with GP. Be mindful of abuse potential and PBS restrictions
- If patients are discharged on oral opioids ensure a comment is included in the discharge summary under instructions to GP outlining indication for opioid and to wean/cease opioids accordingly.
- Patients should be educated on non-pharmacological pain management. Provide patients with reassurance and other techniques such as distraction, rest (if non musculoskeletal), ice or heat packs and physiotherapy if appropriate.¹
- Advise patients to return unused and unwanted opioids to their local pharmacy for destruction

ACKNOWLEDGMENTS
Acute Pain Service
Chronic Pain Service
Palliative Care Service

KEY RELATED DOCUMENTS

- Pain Assessment and Management Algorithm
- WATAG Guidelines for the treatment of neuropathic pain

KEY LEGISLATION, ACTS & STANDARDS

- Poisons Act 1964
- Poison Regulations 1965
- Poison Amendment Regulation 2010, Pharmacy Act 2010

REFERENCES


1. Other tips
The hard copy of this document may be out of date. To ensure you are reading the current version, check the Drug Guidelines section of the Pharmacy Intranet site.