



Government of **Western Australia**
Department of **Health**

Recommendations for prescribing analgesia on discharge following surgery or acute injury

Information for health practitioners
preparing the patient for discharge

This booklet 'Recommendations for prescribing analgesia on discharge following surgery or acute injury: Information for health practitioners preparing the patient for discharge' is designed to be used in conjunction with the patient booklet titled 'Pain relief medications following surgery and injury: Information for patients preparing for discharge'.

Developed by the Analgesia Management Working Group (AMWG) and made available by the Western Australian Medication Safety Group (WAMSG). For more information on the WAMSG or this booklet go to website www.watag.org.au/wamsg

Disclaimer: The information contained in this brochure has been produced as a guide only. It is not intended to be comprehensive and does not take the place of professional medical advice from your doctor, nurse or pharmacist.

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Background

The WA Medication Safety Group (WAMSG) has identified analgesia management post-surgery or acute injury (specifically managing and ceasing opioids), in the transition period from hospital to home, as a priority safety issue for patients and the community.

There has been a substantial increase in pharmaceutically dispensed opioids in recent years. While global consumption of pharmaceutical opioids has more than doubled in the past decade, Australia's usage has quadrupled.¹

Between 1992 and 2007 the Pharmaceutical Benefits Scheme (PBS) prescribed opioids tripled (2.3 million in 1992, to 7 million in 2007); and Schedule 8 (S8) drugs available on the PBS quadrupled (from 4 individual opioid medications in 1992 to 12 in 2013).² The number of opioid formulations (e.g. patches, strength of tablets of the same opioid and additional slow release preparations) has increased dramatically from 11 in 1992 to 241 in 2013,³ and Western Australia's (WA) demand for opioids continues to increase at approximately 15 per cent per annum.⁴ Oxycodone prescriptions in Australia have increased, particularly among older Australians. The increase may, in part, reflect prescribing for pain among an ageing population.⁵

The increase in opioid supply over recent years has been associated with increased harm. Five times as many Australians are treated in hospital from poisoning due to prescription opioids than heroin.⁶ The Australian National Coronial Information System noted more than 800 deaths in Australia were related to oxycodone between 2001–2012, with more than half accidental.⁷

Between 2014 and 2015, approximately 84 per cent of patients who received their first opioid medication from a WA public hospital continued to receive ongoing opioids for up to 60 days, and of these 16 per cent continued opioids for up to one year post discharge.⁴ Parallel to the rise in prescription opioid use, there is growing concern within the healthcare community regarding the misuse of prescription and over-the-counter (OTC) opioids (e.g. codeine containing products).

Opioid dependence can lead to individual problems such as overdose, medical and psychological complications; social and family disruption; violence and drug-related crime; the spread of blood borne diseases and is considered by the World Health Organization (WHO) to be a serious public health issue.⁸

In response to the alarming increases in prescribed opioids and related harm, the Analgesia Management Working Group (AMWG) was formed under the auspice of WAMSG, to develop recommendations to assist practitioners and patients to manage acute pain following surgery or acute injury, when transitioning from hospital back to the community. The Group concluded that this issue transcends all hospital transitions, regardless of whether it is public or private, tertiary or community, large or small in size.

The recommendations are divided into two distinct (parts) documents. The first assists the health practitioner (doctor, or nurse practitioner, and pharmacist) to review the patient's need for pain medication when leaving hospital, titled 'Recommendations for prescribing analgesia on discharge following surgery or acute injury: information for health practitioners preparing the patient for discharge'.

The document provides a 'Post-operative and post-intervention analgesia discharge checklist' to assist health practitioners to identify appropriate post-operative/post intervention analgesia prescribing, with the focus on reducing the patient's pain medication in accordance with a reduction in pain associated with recovery. It includes providing appropriate medication in appropriate quantities to match a patient's needs and avoiding, where warranted, scheduled PBS maximum quantities; and guiding the patient to reduce their reliance on pain medication as recovery takes place and to consider non-pharmacological therapy.

A 'Discharge analgesic plan' is provided to support this process and improve the continuity of care. The Plan outlines the type of medication, dosage and the recommended duration of treatment to advise the patients' medical practitioner, carer or other health provider of the care needed following discharge from hospital.

The second document titled 'Pain relief medications following surgery and injury: Information for patients preparing for discharge', is for the patient. It covers what to expect following surgery or acute injury; types of medications likely to be prescribed; how to take them; possible side-effects and a 'Pain relief management plan'.

The 'Pain relief management plan' provides the patient with more specific information in relation to the pain medication they are taking; how long to take it and when to take it. This becomes the patient's personal record.

In summary, it is intended that these recommendations prompt a review of the patient's analgesic requirements following hospitalisation to determine if opioid management is still required and to ensure that discharge management is clearly communicated to primary healthcare providers.

This will assist to reduce unnecessary use of opioid medication in the community and the potential for:

- the development of dependence from sustained usage
- unused, unwarranted strong/opioid medications in circulation
- misuse or accidental overdoses (morbidity and mortality)
- their use, as a driver of antisocial behaviour in society
- contribution to higher healthcare costs for health service providers.

For further information or to provide feedback email wamsg@health.wa.gov.au

Recommendations for prescribing post-operative analgesia for pain following an acute injury or surgery

It is important to undertake a complete **pain history** to determine the cause and type of pain resulting in appropriate selection of analgesia. Non-pharmacological pain management strategies (e.g. physiotherapy, acupuncture, diversional therapies, coping strategies) may be more appropriate or could be used in conjunction with pharmacological intervention.

Please refer to **Appendix 1** for the 'Post-operative and post-intervention analgesic discharge checklist'.

When prescribing analgesia consider the following:

Age

Consider age-related changes in drug sensitivity, efficacy, metabolism and side effects, e.g. opioid dose reduction is required as age increases and renal function declines.⁹

Intensity of pain

The intensity of pain can be determined by using a pain scale, e.g. the 0–10 numerical rating scale.

Type of pain

Is the type of pain neuropathic or nociceptive?

- A. If nociceptive, follow the World Health Organization analgesic ladder for cancer pain; <http://apps.who.int/iris/bitstream/10665/37896/1/9241544821.pdf> (which can be used as a guide for acute non-cancer pain).¹⁰
- B. If neuropathic, follow the recommendations from the WA Therapeutic Advisory Group (WATAG), www.watag.org.au/watag/publications.cfm – Neuropathic Pain Guidelines.¹¹

Note: Neuropathic pain may require referral to a specialist, such as a rheumatologist, neurologist or pain specialist, for ongoing management.

Renal function

- In patients with renal impairment avoid Nonsteroidal Antiinflammatory Drugs' (NSAIDs), codeine, dextropropoxyphene and pethidine due to the accumulation of active/toxic metabolites.⁹
- Oxycodone, morphine and tramadol can be used with dosage adjustment.⁹

Hepatic function

- The half-life of paracetamol is increased in patients with hepatic impairment. No dosage adjustment is required for mild to moderate hepatic impairment.
- Avoid paracetamol in patients with severe hepatic impairment.¹²
- Caution is required when prescribing opioids in hepatic impairment. Dosage adjustment may be required.

Route of administration

- Oral is preferred because it is simple, non-invasive, has good efficacy in most circumstances and has high patient acceptability.
- Opioid transdermal patches should be avoided for acute pain as they have a delayed onset of action and steady state levels take days to achieve.

Patient-centred approach

- The patient's past experience of pain and the use of analgesics may influence their perception of pain and the appropriateness of the analgesia prescribed e.g. side-effects of specific medication may be intolerable for some patients.

Precautions when prescribing opioids with other medications

- Opioids should be used with caution and at reduced doses when combined with other central nervous system (CNS) depressants e.g. alcohol, phenothiazines, sedative hypnotics, tranquillizers.
- Tramadol has the potential to increase the risk of the serotonin syndrome and should be used with caution and at reduced doses when combined with selective serotonin reuptake inhibitors (SSRIs), serotonin and noradrenaline reuptake inhibitors (SNRIs), tricyclic antidepressants, triptans and pethidine.
- All opioids should be prescribed with caution with monoamine oxidase inhibitors (MAOI), or if the patient has taken these within the last 14 days with the exception of tramadol and tapentadol where it is contraindicated.
- If equianalgesic opioid doses are required, consider using the following tools:
 - Oral morphine equivalent daily dose conversion calculator, [Dose Conversion Calculator](#). Opioids, benzodiazepines and other Schedule 8 medicines: The schedule 8 medicines prescribing code, Department of Health, WA. ww2.health.wa.gov.au/Articles/N_R/Opioids-benzodiazepines-and-other-S8-medicines
 - [Opioid Conversation Chart](#) and [How to use the conversion chart](#). WA Cancer and Palliative Care Network, Department of Health WA.¹³ www.healthnetworks.health.wa.gov.au/cancer/providers/hp_palliative.cfm

Precautions with prescribing opioids in the presence of potential or known abuse or misuse

- Opioid tolerant patients may require a higher dose of opioids to achieve pain relief compared to opioid naive patients. They risk having their pain undertreated due to clinician concerns.
- Prescribers should be aware of the Diagnostic and Statistical Manual of Mental Disorders (5th edition) Criteria for Opioid Use Disorder.¹⁴
- Screening tools, such as the Opioid Risk Tool (available from www.drugabuse.gov/sites/default/files/files/OpioidRiskTool.pdf) can be used to provide a quick assessment of the risk of opioid dependence.¹⁵
- If a patient is considered to have moderate or high-risk of misuse, prescribers should seek advice from:
 - a pain specialist for clinical advice, prior to commencement of treatment with an opioid or develop a non-opioid analgesia management plan
 - the Department of Health WA for patient dispensing history and regulatory advice.

The Department of Health Schedule 8 Prescriber Information service (WA Public and Private S8 Prescriptions).

To check if there are any restrictions on prescribing for all patients to be discharged on S8 medicines

Phone: (08) 9222 4424. Available 8.30am to 4.30pm Monday to Friday.

Medicare Australia's Prescription Shopping Information Service (PSIS), (PBS only).

To report a patient suspected of obtaining more medicine than required.

To check whether moderate or high risk scoring patients are already known

Phone: 1800 631 181.

Available 24 hours/7 days a week

Precautions and co-morbidities

- **Epilepsy or risk of seizure (head injury or alcohol and drug withdrawal):** All opioids may increase the risk of seizure. Pethidine and tramadol may have a higher risk and should be avoided if possible.
- **Respiratory:** Prescribe opioids with caution in patients with respiratory depression, severe obstructive airways disease, asthma and obstructive sleep apnoea. Tramadol, tapentadol and buprenorphine may have a lower risk of respiratory depression.
- **Gastrointestinal:** Prescribe opioids with caution after biliary surgery or biliary colic as they may cause spasms of the sphincter of Oddi.
- **Constipation:** Consider opioids with less impairment of gastric motility such as the combination of oxycodone/naloxone SR (Targin[®]), tramadol and tapentadol.
- **Stomas:** Avoid slow release formulations in patients with ileostomies and monitor closely for efficacy in patients with colostomies due to reduced absorption of the medication.

Recommendations for prescribing discharge analgesia for pain following an acute injury or surgery

When prescribing discharge analgesic medications ensure therapy is adequate for the patient's pain level, type of surgery and expected recovery time.

Opioid based medication may not always be the most appropriate medication for discharge.

Paracetamol

- Should be prescribed to all patients requiring pain relief.
- Usual adult dose is 1 g qid (maximum of 4 g in 24 hours). If patient weighs ≤ 50 kg, 15 mg/kg/dose is recommended.⁹
- Co-prescribing with an opioid may reduce opioid requirements by 20–30 per cent.¹²
- Caution in patients with active liver disease, history of heavy alcohol intake and glucose-6-phosphate-dehydrogenase deficiency.¹¹ (See above under 'Hepatic function').

Non-Steroidal Anti-inflammatory Drugs (NSAIDs)

- NSAIDs are effective in the treatment of acute pain.
- NSAIDs will usually be prescribed for a short course (up to 7 days) immediately following surgery or injury. There is a lower risk of GI bleeding or ulcers with COX-2 selective NSAIDs.⁹
- There is a higher risk of adverse renal effects from all NSAIDs if there is pre-existing renal impairment, hypovolaemia, hypotension, or concurrent use with other nephrotoxic agents and ACE inhibitors.
- Avoid use in congestive heart failure and use with caution in elderly patients.⁹

Opioids

- Prescribe opioids according to the duration of treatment required rather than maximum PBS quantities.
- Avoid prescribing more than 5–7 days of supply.
- All patients should see their primary care provider or nominated health practitioner within 5–7 days of discharge.
- Avoid prescribing slow release opioids unless the patient was previously prescribed these or a pain specialist has recommended this therapy.

WA regulatory requirements for prescribing Schedule 8 medicines

All S8 prescriptions need the:

1. name, address and telephone number of prescriber (these can be pre-printed on the prescription form even when the prescriber is otherwise handwriting the prescription).
 2. date the prescription was written
 3. name and address of the patient
 4. date of birth of the patient
 5. description of the medicine including strength and formulation of the medicine (brand name can be used provided this adequately describes the medicine to be dispensed)
 6. dose of the medicine
 7. precise directions for use
 8. quantity to be dispensed
 9. number of repeats and interval between repeats (repeats are not prescribed when discharging patients)
 10. signature of the prescriber.¹⁶
- Handwritten prescription: items 2 through 10 inclusive must be written in ink by the prescriber.
 - Computer generated prescriptions: the prescription must be signed in ink by the prescriber.
 - Schedule 8 medicines must be written on a different prescription form to Schedule 4 medicines.
 - Only one Schedule 8 medicine can be written on the same prescription unless the prescribed medicines are multiple forms of the same medication (for example, tablets and mixture).

The pharmacist must contact the prescriber for confirmation if they are not familiar with the prescriber's handwriting.

For patients on **opioid substitution programs**, where additional immediate release opioids are required on discharge (e.g. for postoperative acute pain) the prescriber should contact:

1. the hospital's acute pain service team for advice
2. the patient's authorised prescriber of the opioid substitution program regarding the details of supply and discharge plans.

If the authorised prescriber is not contactable, health professionals can contact the **Clinical Advisory Service**, for clinical advice on substance abuse disorders.
Phone: 08 9442 5042. Available 24 hours.

Communication to the primary care provider

It is important to complete the 'Discharge analgesic plan' in **Appendix 2** and communicate to the patient's primary care provider or nominated health practitioner.

Except for uncomplicated elective day-cases, a discharge summary should be completed by the time of discharge and include a comprehensive medication list. If the discharge summary contains all of the information required within the 'Discharge analgesic plan', it is not necessary to complete the Plan in addition to the discharge summary.

A copy of the discharge summary and the 'Discharge analgesic plan' is to be included in the patient's medical file, provided to the patient and/or their carer or another patient-nominated health practitioner.

Communication with the patient

It is important to:

- discuss the discharge medication plan with the patient, including the aim of therapy (e.g. to allow rehabilitation and mobility) and the expected duration for analgesia pain relief medication
- discuss the individual medications and how to take them
- discuss what to do if they continue to have pain or their pain resolves and they don't feel they need to take the medications
- explain how to dispose of unwanted medication
- provide the patient with the booklet for 'Pain relief medications following surgery and injury: Information for patients preparing for discharge'.

Appendix 1 – Post-operative and post-intervention analgesia discharge checklist

Recommendations for prescribing post-operative analgesia

Review analgesia prescribed for discharge to ensure it is appropriate for patient management following hospitalisation.

Consider patient's age, type of pain, renal and hepatic function, route of administration, co-morbidities and current medications.

Recommendations for prescribing discharge analgesia

Check that discharge analgesia provided is adequate to cover the patient's pain level, type of surgery and expected recovery time. Consider:

- regular paracetamol for all patients
- continuation of NSAIDs initiated in hospital to a maximum of seven days
- tramadol (immediate release), four hourly prn (up to 20 capsules) for patients with moderate pain

or;

opioid (immediate release), four hourly prn (up to 20 capsules) for patients with moderate to severe pain.

Determine quantity of discharge medication from number of days that medication will be required rather than maximum PBS quantity or box size.

At some services the following medications will require consultation with a supervisor or pain service team before prescribing:

- adjuvant therapy including tricyclic antidepressants, duloxetine, gabapentin and pregabalin
- sustained release opioids (including tramadol or tapentadol)
- ketamine lozenges or wafers
- opioids for longer than five days.

(PTO for checklist)

	Initial/NA
<p>Checklist for Prescribers:</p> <p>Check for allergies or previous adverse drug reactions Has the patient been on long term opioid therapy? Refer to DSM-5 Criteria for Opioid Use Disorder and the Opioid Risk Tool to screen patients at risk of opioid dependence. If moderate or high risk, contact the following for information (prescriber only services):</p> <ul style="list-style-type: none"> • Prescription Shopping Information Services 1800 631 181 • Department of Health Prescriber S8 Information Service (08) 9222 4424 <p>For patients on opioid substitution programs:</p> <ul style="list-style-type: none"> • consult with your acute pain service or consultant before prescribing opioids • consult with the authorised prescriber of the opioid substitution program or (if the prescriber is unavailable) the Clinical Advisory Service on (08) 9442 5042 (for pharmacists and prescribers only) for advice on substance abuse disorders. <p>Prescription complies with WA regulatory requirements. Discharge analgesic plan completed and faxed to the family GP or nominated health practitioner (and the authorised prescriber of the opioid substitution program, if applicable), (Appendix 2).</p>	
<p>Checklist for Pharmacists:</p> <p>Prescription complies with WA regulatory requirements. Counselling provided (CMI and hospital information leaflets). ‘Pain relief medications following surgery and injury’ booklet is provided to the patient, with the pain relief management plan in the booklet completed. Patient understands when to cease or wean pain medications. Discharge medications are checked and reconciled with the medication chart.</p>	
<p>Checklist for Nurses:</p> <p>(*if not completed by pharmacist)</p> <p>*Discharge medications are checked and reconciled with medication chart. *Counselling has been provided on discharge medications (CMI and hospital information leaflets). Patient advised to see their family GP/nominated health practitioner within 5–7 days of discharge Discontinued inpatient medications are not given with discharge medications. Patient advised to give any unused opioids to their pharmacy, once they get home. Patient is aware of who to contact if they have questions (refer to ‘Pain relief medications following surgery and injury: Information for patients preparing for discharge’ booklet).</p>	

Appendix 2 – Discharge analgesic plan



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URN:
Family name:
Given names:
Address:
Date of birth: Sex: M <input type="checkbox"/> F <input type="checkbox"/>

Date: _____

Dear: _____

This patient has recently been discharged from: _____

Diagnosis/procedure: _____

The pain medications prescribed at discharge for the patient are:

(Key: ✓ yes, ✗ no, N/A = not applicable) (IR = immediate release; SR = sustained release/slow release)

Drug	Dose (mg)	Frequency	Cease: when discharge supply finished (✓ / ✗ / N/A)	Titrate: dose downwards according to pain requirements, then cease (✓ / ✗ / N/A)
Paracetamol				
Paracetamol SR				
Paracetamol/codeine combination				
Anti-inflammatory (Specify) _____				
Tramadol IR				
Tramadol SR				
Oxycodone IR				
Oxycodone/Naloxone (Targin®)				
Tapentadol IR				
Tapentadol SR				
Nerve-related pain medication (adjuvant):				

If you have any questions, or are concerned about taking on responsibility for this, contact the treating team.

Prescriber's signature: _____

Name: _____

Contact number: _____

MR NUMBER

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Acknowledgements

The Analgesia Management Working Group (2016) membership

McKnight, David	Chief Pharmacist (Chair)	Royal Perth Bentley Group
Irwin, Kathy	Project Coordinator (WAMSG)	Office of the Chief Medical Officer
Duong, Thomas	Senior Pharmacist	Next Step
Fitzsimons, Kerry	Senior Pharmacist	Fiona Stanley Hospital
Gelavis, Anna	Manager – Drugs Of Dependence	Office of Chief Health Officer
Goucke, Roger	Consultant: Pain Medicine	Sir Charles Gairdner Hospital
Gregory, Lesley	Executive Officer (WATAG)	Office of the Chief Medical Officer
Jamison, Ali	Senior Pharmacist	Osborne Park Hospital
Lim, Susan	Senior Pharmacist	Armadale Health Service
Chan, Ming Yee	Senior Pharmacist	St John of God Subiaco Hospital
Neppalli, Sneha	Resident Medical Officer	Sir Charles Gairdner Hospital
Tuffin, Penny	Advanced Practice Pharmacist	Royal Perth Hospital & Fiona Stanley Hospital
Vlad, Ioana	Consultant: Emergency & Toxicology	Sir Charles Gairdner Hospital
Vytialingam, Rene	Addiction Medicine Fellow	Next Step

Reviewers:

Librizzi, Derin	Clinical Nurse Consultant	Fiona Stanley Hospital: Pain Service
Schug, Stephan	Director of Pain Medicine	Royal Perth Hospital

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