

Conserving oral opioid medicines: Strategies and safety considerations

What you need to know?

- There are multiple shortages or disruptions to supply of oral opioid medicines in Australia.
- The Therapeutic Goods Administration (TGA) has approved overseas registered alternative products under Section 19A (S19A), of the Therapeutic Goods Act 1989.
- Conservation strategies that may be considered during the period of shortage include:
 - other treatment options for managing pain relief symptoms, including non-pharmacological and pharmacological options
 - prescribing the smallest quantity that is clinically necessary and appropriate for the patient
 - supporting patients to switch to other opioid or non-opioid medicines as appropriate
 - prioritising preparations of morphine oral liquid for situations where it is not appropriate to disperse or break an alternative opioid in solid dose form or where therapeutic alternatives are contra-indicated or otherwise clinically inappropriate.
- When changing or switching between opioid medicines, concentration or formulation, serious errors can occur if dose conversions occur incorrectly, or patients are not educated about such changes.
- There are several opioid conversion resource tools available to assist in determining a suitable dose. Refer to page 7, 'Changing or switching between opioid medicines'.
- Conservation strategies may not be appropriate for palliative care and end-of-life patients.
- Applying a safe prescribing checklist helps to mitigate risk when managing changes in availability of oral opioid medicines.

More information on conservation strategies, safety considerations and resources to support safe use of opioids during shortages or supply disruption is included in this guidance. The [Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard](#) includes priority actions to reduce opioid medication-related harm, including appropriate prescribing of opioids.

Australia is experiencing shortages or disruption to supply of multiple oral opioid medicine products, with some being discontinued. To assist with supply disruption, the TGA has approved overseas registered alternative products under S19A, of the Therapeutic Goods Act 1989. These products are not necessarily available on the Pharmaceutical Benefits

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Scheme (PBS) and prescribers should refer to the [PBS website](#) for the most current information.

There are frequent notifications about opioid medicine product availability and the notification period may be short. To minimise the impact on patients, safety considerations and risk mitigations, including conservation strategies, should be considered when responding to changes in the availability of opioid medicines.

Purpose

This guidance has been developed by the Australian Commission on Safety and Quality in Health Care (the Commission) to assist prescribers to provide safe and quality health care during disruption to supply of oral opioid medicines in Australia.

Oral opioids are high-risk medicines used to manage severe pain and difficult or laboured breathing in many care settings, including cancer treatment and end-of-life care. To minimise patient harm, prescribers should adopt safety considerations prior to initiation or continuation of opioid medicine therapy. Whilst these considerations may not apply in the same way for all patients, particularly those at end-of-life, there are fundamental best practice principles for managing opioids.

Background

In Australia, there have been discontinuations and shortages of oral opioid medicines. This has included oxycodone capsules, morphine oral products and HYDROMORPHONE products. In addition, morphine sulfate pentahydrate modified-release capsule (MS Mono) and the immediate-release tablet (Sevredol) are planned to be discontinued during 2024 and 2025. Visit the TGA website [for further information on oral opioid medicines supply disruption](#).

To alleviate supply disruption, the TGA has approved overseas-registered alternative products under S19A, of Therapeutic Goods Act 1989. Refer to the [Section 19A approvals database](#) for more information. Alternative products may also be available under the [Special Access Scheme \(SAS\)](#), which allows prescribers to apply for use of unapproved, unregistered products for individual patients.

Conservations strategies

The following conservation strategies are in response to supply disruptions and discontinuations of oral opioid medicines.

All oral opioid medicines:

- Consider a range of options for managing pain relief and inform the patient of suitable treatment options to help with symptoms, including paracetamol and non-steroidal anti-inflammatories, and nonpharmacological treatments such as splinting, heat packs, ice packs, physiotherapy, exercise and psychological techniques. The [Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard](#) includes priority actions to reduce opioid medication-related harm. Other treatment options may not be applicable to palliative care and end-of-life patients.

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- Review compliance with opioid analgesic stewardship strategies for patients experiencing acute pain. Refer to the [Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard](#) for more information.
- Where possible, use paracetamol and/or anti-inflammatories as opioid-sparing strategies. An opioid analgesic may be prescribed when other analgesics are not clinically feasible or sufficient, and the potential benefits outweigh the potential harms. Assess the requirements of your patient and prescribe the lowest dose, for the shortest duration and smallest quantity that is clinically necessary and appropriate. For example,
 - ten oxycodone 10 milligrams (mg) immediate release capsules may be sufficient rather than twenty capsules (a full box)
 - for morphine oral liquid, consider prescribing a total volume (in millilitres [mL]) that is less than the maximum PBS quantity; 100 mL may be sufficient, rather than a 200 mL bottle.
 - for oxycodone, morphine and HYDROMORPHONE oral liquids, PBS listing allows prescribers to prescribe volumes smaller than a whole bottle at PBS subsidised prices.
- Ongoing supply disruptions have resulted in the increased need to switch patients to other opioid medicines with potential safety risks. Refer to opioid conversion resource tools and calculators to assist in determining a suitable dose. See 'Safety considerations' on page 7 for a list of resources. Local policies, procedures and guidelines may also be in place.
- Check or liaise with the hospital pharmacy department and/or the medicines governance committee for any sudden changes in availability that will impact oral opioid medicines for patients whilst in hospital. For individuals (and their family or carers) in the community or residential care, refer to local governance mechanisms, such as via the Medicines Advisory Committee (MAC) and/or community pharmacy.

Morphine oral liquid:

- Preparations of morphine oral liquid should be prioritised for situations where:
 - the intended dose cannot be safely achieved by dispersing or breaking a scored morphine 'immediate release' tablet or an alternative opioid in solid dose form
 - the medicine will be administered outside of hospital, and it is inappropriate for an individual (or their family or carer) to break or disperse a tablet formulation of morphine or an alternative opioid in solid dose form
 - therapeutic alternatives are contra-indicated or otherwise clinically inappropriate. For example, excipient allergies
 - there is insufficient evidence for alternative therapeutic agents for the proposed indication or patient group being treated.
- Check for available concentrations (1 mg/mL, 2 mg/mL, 5 mg/mL and 10 mg/mL) prior to prescribing. Refer to the table in [About the shortage of Ordine \(morphine\) oral liquid](#) or the patient's usual/preferred pharmacy to see when the different strengths are expected to return to normal supply.
- Review all other medicines that are used to manage laboured breathing/shortness of breath and ensure other pharmacological and non-pharmacological strategies have been optimised.

HYDROMORPHONE oral products:

- [Therapeutic Guidelines](#) recommend that use is limited to prescribers experienced in the use of HYDROMORPHONE.
- HYDROMORPHONE is five times more potent than morphine. Where a patient is switched to HYDROMORPHONE from an alternative opioid, double check that the dose prescribed

represents a safe conversion. See ‘Changing or switching between opioid medicines’ on page 7 for a list of resources.

- For prescribing restrictions applicable to HYDROmorphone, refer to local policies, procedures and guidelines.
- Renally excreted metabolites of HYDROmorphone can accumulate and lead to dose dependent neurotoxic effects.

Safety considerations

As with all medicines, safe and quality use is supported by best practice prescribing principles. Applying a safe prescribing checklist helps to mitigate risk when managing changes in availability of oral opioid medicines.

Safe prescribing checklist

To safely prescribe opioid medicines, always include the following on all prescriptions and medication orders (in accordance with state or territory legislative requirements):

- Active ingredient name
- Strength or concentration of product
- Formulation
- Dose:
 - Oral liquids: dose in milligrams (mg) and volume (mL)
 - Tablets/capsules: dose in milligrams (mg) and number of tablets/capsules
 - Maximum daily dose (in 24 hours)
- Route
- Dosing frequency
- Quantity for supply (as applicable for hospital discharge, residential care facilities and community patients, or as per local policy, procedures and guidelines).

When prescribing you should also consider PBS restrictions and availability.

Table 1: Potential safety issues to be considered prior to prescribing oral opioid medicines

Consideration	Details
Appropriate prescribing of opioids	Ensure that analgesic prescribing for a patient with pain is guided by its expected severity and assessment of patient-reported pain intensity and the impact of pain on the patient’s function. Non-pharmacological and pharmacological options for managing pain should be considered in discussion with the patient and their carer. Refer to the Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard for more information.
Avoid misinterpretation	Always prescribe the dose in mg rather than volume (mL) for oral liquids as the available concentration(s) of products may change.

Consideration	Details
	<p>Always prescribe the dose and number of tablets/capsules as the availability of different strengths may change.</p> <p>Always prescribe the total volume of oral liquid that is to be supplied and consider whether a quantity smaller than the standard pack size is more appropriate to ensure patient safety.</p>
Appropriate dosing	<p>When initiating, changing or switching between opioids, concentration or formulation, take care when selecting the starting dose and dosage intervals. There are multiple opioid conversion resource tools and calculators available to assist in determining a suitable dose, see page 7 for a list of resources. Specialist advice should be sought by prescribers with limited experience with opioid conversions.</p> <p>For general practitioners (GPs): use caution when prescribing opioids at any dosage, especially when increasing doses to 50 mg oral morphine equivalent (OME) or more per day. GPs must be able to justify a decision to titrate dosage to 100 mg or more OME per day and should avoid increasing dosage to 100 mg or more OME per day without specialist involvement. See RACGP – Overview of opioid analgesics for more information.</p>
Risk mitigation	<p>Awareness of product availability (including S19A products) of opioid medicines, including strength, concentration and formulation can assist with minimising safety risks to patients at the point of prescribing.</p> <p>View the full patient record in Real Time Prescription Monitoring (RTPM) before prescribing an oral opioid medicine, to assist with clinical decision making.</p> <p>Consider enrolling your patient onto the Take Home Naloxone Program, when switching or changing opioid oral medicines.</p> <p>For hospital settings: prescribers should be aware of what opioid medicines are available for initiation and continuation on the local/state-wide formulary. If a clinically appropriate product is not available, contact your local Drug and Therapeutics Committee or hospital pharmacy for advice on suitable alternatives.</p>
Monitoring	<p>Careful observation of an opioid-naïve* patient is required when commencing an opioid medicine, and when changing a patient to an alternative medicine, formulation or route of administration. Monitoring should continue until the patient is stabilised or as appropriate.</p>
Pharmacokinetic profile	<p>Consider the pharmacokinetic profile when determining a new dosage regimen, also noting that for alternative medicines:</p> <ul style="list-style-type: none"> • Dose adjustments may be required when prescribing for patients with impaired kidney or liver function • Duration of action and dosing intervals may differ

Consideration	Details
	<ul style="list-style-type: none"> Onset of action and time to peak effect may vary.
Formulation (or dosage form)	<p>Consider the suitability of the medicine’s formulation for the intended clinical use. For example, modified release preparations are typically more appropriate for long-term use. Modified release preparations should be swallowed whole and not halved or crushed.</p> <p>Advice should be sought on whether a solid oral dosage form can be crushed and/or the most appropriate formulation for individuals with swallowing difficulties. For instance, check Don’t rush to crush or seek pharmacist advice.</p>
Product factors	<p>Assess for ‘look-alike, sound-alike’ (LASA) medicine names. Several examples of LASA medicine names are present in the opioid therapeutic group (e.g. HYDROmorphine and morphine).</p> <p>Assess SAS and S19A status and the potential for the label to contain information in a language other than English.</p>
Patient factors	<p>Examples of patient factors that can impact on the suitability and safety of alternative medicines include:</p> <ul style="list-style-type: none"> Manual dexterity in opening bottles versus ‘blister packs’ Similarity and colouring of packaging for different strengths of opioid medicines can lead to incorrect dose administration Organ impairment, such as liver or kidney, can influence the choice of opioid product and appropriate dosing. Consider seeking specialist advice Other medicines – consider the potential for drug interactions Sensitivities and previous adverse drug reactions (ADRs) should be noted Cost impact on adherence when alternative medicines are initiated. Some S19A alternatives may be PBS subsidised. However, the information is updated regularly; for the most up-to-date information refer to the PBS website. Medicines available via SAS are not PBS subsidised.
Patient counselling	<p>Changes to medicines present an opportunity to promote discussion and shared decision-making with patients and family/carers. Some key factors to discuss when introducing an alternative medicine include:</p> <ul style="list-style-type: none"> Reconfirming the clinical indication Clear instructions and confirmation of what it replaces (for example, brand or medicine name) Discussing any potential drug interactions Dosing instructions and the need for any specialised measuring device Appropriate management of any new side effects.

Consideration	Details
Transition of care	<p>Ensure that opioid medicines are available and can be accessed when patients transition to different settings. For example, from hospital to community or metropolitan to rural/remote areas.</p> <p>Ensure any changes are communicated to all healthcare practitioners, and people involved in the care of the patient (e.g. their family and/or carer). Encourage the use of an up-to-date medicines list. When ceasing a medicine that is no longer available, record this information.</p> <p>Avoid the use of brand names. Use the active ingredient name(s) when prescribing or communicating medicines-related information during transitions of care. Refer to Principles for safe and high-quality transitions of care for more information.</p>
Electronic medication management (eMM) systems	<p>Review and update the eMM system to reflect any product changes to prevent selection errors at the point of prescribing. The review should be overseen by the local medicines governance committee, for instance, the Drug and Therapeutics Committee (or similar).</p>

*opioid-naïve = Patients who have not received opioid analgesics in the 30 days before the acute event or surgery.

Changing or switching between opioid medicines

This includes changing, or switching, from one opioid to another or from one formulation or strength to another.

When changing or switching between opioid medicines, concentration or formulation, serious errors can occur if dose conversions are not correct, or patients are not educated about the changes.

There are multiple opioid conversion resources available to assist in determining a suitable dose. Check which tool is preferred by your local Palliative Care, Acute Pain Management Service, or local pharmacy and seek specialist advice if there is limited experience with opioid conversions.

Resources include:

- [Australian and New Zealand College of Anaesthetists \(ANZCA\) Faculty of Pain - Opioid Calculator](#)
- [eviQ Opioid Conversion Calculator](#)
- [Safer Care Victoria: Opioid conversion ratios – Guidance document](#)
- [palliMEDS app](#) (For download onto smartphones)
- [Therapeutic Guidelines](#)
- [Australian Medicines Handbook](#)

These resources do not take into consideration the available concentrations of opioid medicine at the point of prescribing. Prescribers are advised to use clinical judgement and consider an

individual patient's circumstances, in consultation with the patient and/or their family or carer, when switching or changing between opioid medicines.

Additional care should be taken when calculating and prescribing dosages, particularly when prescribing in both milligrams (mg) and volume (mL) for oral opioid liquids. Liaise with your local medicines governance group (e.g. Drug and Therapeutics Committee or MAC), hospital pharmacy or community pharmacy for available concentrations and current information.

Useful resources

- [About the shortage and discontinuation of oral opioid products](#) [online]. Therapeutic Goods Administration (TGA). 28 August 2024 [cited 10 September 2024]
- [About the shortage of Ordine \(morphine\) oral liquid](#) [online]. Therapeutic Goods Administration (TGA). 28 August 2024 [cited 10 September 2024]
- Therapeutic Goods Administration (TGA) publishes medicine updates and information on approved products under Section 19A, on the TGA [Section 19A approvals database](#).
- [Therapeutic Guidelines](#) [online]. Melbourne: Therapeutic Guidelines Limited.
- [Australian Medicines Handbook](#) [online]. Adelaide: Australian Medicines Handbook Pty Ltd.
- [Don't Rush to Crush](#) [online]. Advanced Pharmacy Australia [also available through eMIMS, MIMS Online and AusDI via states and territory medicines information portals]
- Australian Commission on Safety and Quality in Health Care [guidance on conserving medicines within a focus on medicines shortages](#).
- Australian Commission on Safety and Quality in Health Care [Principles for safe selection and storage of medicines](#) provides guidance on risk reduction strategies to address safe selection and storage of all medicines.
- Australian Commission on Safety and Quality in Health Care [Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard](#)
- Australian Commission on Safety and Quality in Health Care [National Safety and Quality Health Service \(NSQHS\) Medication Safety Standard](#)
- Australian Department of Health and Aged Care [Medication management in residential aged care facilities guiding principles](#)
- Australian Department of Health and Aged Care [Medication management in the community guiding principles](#)
- Australian Commission on Safety and Quality in Health Care [Shared decision making resources for clinicians](#)
- Australian Commission on Safety and Quality in Health Care [Real-time prescription monitoring - Fact sheet for prescribers and pharmacists](#)
- Australian Commission on Safety and Quality in Health Care [Real-time prescription monitoring: Clinical risk management](#)
- Australian Commission on Safety and Quality in Health Care [Principles for safe and high-quality transitions of care](#)
- The Royal Australian College of General Practitioners (RACGP) [Prescribing drugs of dependence in general practice, Part C2 – The role of opioids in pain management – Chapter 6 Overview of opioid analgesics](#)
- The Pharmaceutical Benefits Scheme [PBS website](#)
- [Medicines and Palliative Care Information Resources](#). palliAGED. [cited 10 September 2024]

State and Territory safety alerts and guidance

- NSW Health: [Safety Alert 007/24 - UPDATED: Changes to supply of morphine oral liquid in Australia](#) (21 May 2024).
- SA Health: [Safety Alert 01/24 – Discontinuation of several oral opioid products](#) (February 2024)
- SA Health: [Safety Alert 04/24 – Discontinuation of Several Oral Opioid Products – Update](#) (May 2024)

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- SA Health: [Safety Alert 06/24 – Limited Availability of Several Oral Opioid Liquid Products](#) (June 2024)
- QLD Health: Patient Safety Notice 11/2024 – Constrained supply of morphine oral liquid (17 July 2024)
- QLD Health: [Fact sheet – Constrained supply of morphine oral liquid](#) (17 July 2024)

Find out more

For more information, visit [TGA Medicine Shortage Reports Database](#) or contact the Commission at medsafety@safetyandquality.gov.au or call 1800 304 056.

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