AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

GUIDANCE
for pharmacists

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
    - supplying the smallest quantity that is clinically necessary and appropriate for the patient in liaison with the prescriber
    - 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 8, ‘Changing or switching between opioid medicines’.
- Conservation strategies may not be appropriate for palliative care and end-of-life patients.
- Applying a safe dispensing 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

Scheme (PBS) and pharmacists 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 pharmacists 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 the supply of opioid medicines. Whilst these 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) will 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 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 unregistered products for individual patients.

Conservation Strategies

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

You will need to refer to local policies, procedures and guidelines, and/or liaise with prescribers for additional advice and guidance. Hospital pharmacists may also need to liaise with their local Drug and Therapeutics Committee (DTC) (or equivalent). For residents of aged care facilities, it may be appropriate to liaise with the Medicines Advisory Committee (MAC).

All oral opioid medicines:

- Counsel patients on other treatment options for managing pain relief 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. Referral to their specialist, general practitioner or another health care practitioner may be required.

- Review compliance with opioid stewardship strategies for patients experiencing acute pain. Refer to the Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard for more information.
- Where possible, ensure use of paracetamol and/or anti-inflammatories as opioid-sparing strategies have been considered. An opioid analgesic may be prescribed when other analgesics are not clinically feasible or sufficient, and the potential benefits outweigh the potential harms. In liaison with the prescriber, ensure the lowest dose, for the shortest duration has been prescribed and supply the smallest quantity that is clinically necessary and appropriate for your patient. 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 supplying a total volume (in millilitres [mL]) that is less than the maximum PBS quantity, if appropriate. For example, 100 mL may be sufficient, rather than a 200 mL bottle.
- for oxycodone, morphine and HYDROmorphone liquids, PBS listing allows pharmacists to dispense volumes smaller than a whole bottle at PBS subsidised prices.
- Reduce minimum/maximum quantities for stock held in ward storage or imprest areas for the duration of the supply constraint, to minimise wastage.
- Ongoing supply disruptions have resulted in patients switching from their originally prescribed opioid medicine to other opioid medicines. Oral morphine equivalent (OME) daily dose is a marker of analgesic potency, and it allows comparisons between different opioids in terms of their ability to produce the same analgesia as would be expected from a given dose of morphine. Opioid equianalgesic calculators express the potency as total oral morphine equivalent (OME) daily dose. Refer to opioid conversion resource tools and calculators to assist when clinically reviewing suitable opioid dosages. See ‘Changing or switching between opioid medicines’ on page 8 for a list of resources. Local policies, procedures and guidelines may also be in place.
- You may need to liaise with your local Drug and Therapeutics Committee or Medicines Advisory Committee (MAC) to ensure mechanisms are in place to respond to sudden changes in product availability and methods of rapid communication of such information are considered. Refer to the TGA for further information on oral opioid medicines supply disruption.

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 supplying. Refer to the table in About the shortage of Ordine (morphine) oral liquid and local wholesalers to see when the different strengths are expected to return to normal supply.

- When conducting a medication review and/or prior to supplying, 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 liquid:

- 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 and contact the prescriber where there are concerns regarding a possible dose conversion error. See 'Changing or switching between opioid medicines' on page 8 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 principles. Applying a safe dispensing checklist helps to mitigate risk when managing changes in availability of oral opioid medicines.

Safe dispensing checklist

BEFORE supplying oral opioid medicines, always confirm the following are documented 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)

Consider whether a new legally compliant prescription is required for a therapeutic substitution in the event of a shortage. e.g. prescriber writes prescription for morphine 2 mg/mL but only morphine 1 mg/mL available.

For more information on safe dispensing processes, see Guidelines for dispensing of medicines on the Pharmacy Board website. When supplying, you should also consider PBS restrictions and availability.

Table 1: Potential safety issues to be considered prior to reviewing or supplying oral opioid medicines.

Consideration	Details
Appropriate prescribing of opioids	Check 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 check the dose in mg rather than volume (mL) for oral liquids is prescribed and included in medication label directions as the available concentration(s) of products may change. Always check the dose and number of tablets/capsules is prescribed as the availability of different strengths may change.
Appropriate dosing	When initiating, changing or switching between opioids, concentration or formulation, take care when reviewing the starting dose and dosage intervals. There are multiple opioid conversion resource tools and calculators available to assist when reviewing a suitable dose, see page 8 for a list of resources. Specialist advice should be sought if there is limited experience with opioid conversions. Be aware of opioid ceiling doses when reviewing prescribed doses. General practitioners must be able to justify a decision to titrate dosage to 100 mg or more oral morphine equivalent (OME) per day and should avoid increasing dosage to 100 mg or more OME per day without specialist involvement. Pharmacists should liaise with general practitioners when dosage titration is more than 100mg OME per day. See RACGP – Overview of opioid analgesics for more information.
Risk mitigation	Awareness of product availability (including SAS and S19A products) of opioid medicines, including strength, concentration and formulation can assist with minimising safety risks to patients at the point of dispensing. View the full patient record in Real Time Prescription Monitoring (RTPM) before supplying an oral opioid medicine, to assist with clinical decision making. Consider enrolling patients onto the Take Home Naloxone Program, when switching or changing opioid oral medicines. For hospital settings, pharmacists 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 equivalent.

Consideration	Details
Monitoring	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.
Pharmacokinetic profile	Consider the pharmacokinetic profile when reviewing a new dosage regimen, also noting that for alternative medicines: • Dose adjustments may be required for patients with impaired kidney or liver function • Duration of action and dosing intervals may differ • Onset of action and time to peak effect may vary.
Formulation (or dosage form)	Consider the suitability of the medicine's formulation for the intended clinical use. For example, long-term use of modified release preparations is not desirable and has high risks associated, however may be appropriate in the palliative care setting. Modified release preparations should be swallowed whole and not halved or crushed. Immediate release formulations should not be changed to modified release formulations. Specialist advice should be sought if there is limited experience with opioid conversions. Advise 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.
Product factors	The Principles for safe selection and storage of medicines should be applied when using S19A alternatives. Assess for 'look-alike, sound-alike' (LASA) issues. Several examples of LASA medicine names are present in the opioid therapeutic group (e.g. HYDROmorphone and morphine). Assess SAS/S19A status and the potential for the label to contain information in a language other than English. Check the different storage requirements and expiration dates (e.g. both the manufacturer's expiry date and once a morphine oral liquid bottle is opened) of alternative products and ensure this is communicated to nursing staff and patients. If repackaging is required, pharmacists must complete a risk assessment to determine if repackaging supports safe and effective use of the product. The risk assessment should include assessing suitability of the product for repackaging and suitability of the new packaging for the product. For example, things to consider include: product stability, child-resistant packaging requirements, contamination/leakage, light exposure and moisture. See Australian Pharmaceutical Formulary for more information.

Consideration	Details
Patient factors	Examples of patient factors that can impact on the suitability and safety of alternative medicines include: • 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. SAS and some S19A alternatives are not PBS subsidised. 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. • Altered storage requirements in the home (e.g. storage out of reach of children, diversion risk consideration)
Patient counselling	Changes to medicines present an opportunity to promote discussion and shared decision-making with patients and family/carers. Some patients may benefit from a medicines review such as a Home Medicines Review or a Residential Medication Management Review. Some key factors to discuss when counselling an alternative medicine include: • Reconfirming the clinical indication • Clear instructions and confirmation of what it replaces (for example, brand or medicine name and differences in packaging) • Discussing any potential drug interactions • Dosing instructions and the need for any specialised measuring device • Supply of written information in English (obtain translated version from supplier(s) if required) • Appropriate management of any new side effects.
Transition of care	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. 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 a medicine that is no longer available is ceased, record this information in the patient's dispensing profile. Avoid the use of brand names. Use the active ingredient name(s) when communicating medicines-related information during

Consideration	Details
	transitions of care. Refer to Principles for safe and high-quality transitions of care for more information.
Electronic medication management (eMM) systems	eMM system will require review and update to reflect any product changes to prevent selection errors at the point of prescribing, administration and/or dispensing. The review should be overseen by the local medicines governance committee, for instance, the Drug and Therapeutics Committee (or similar).

*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 resource tools available to assist in determining a suitable dose. Check which tool is preferred by your local Palliative Care, Acute or Chronic Pain Management Service, or prescriber. Specialist advice should be sought 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)
- eTG complete
- Australian Medicines Handbook
- Australian Pharmaceutical Formulary

These resources do not take into consideration the available concentrations of opioid medicine at the point of prescribing.

Additional care should be taken when calculating and reviewing dosages, particularly when both milligrams (mg) and volume (mL) is prescribed for oral opioid liquids. Liaise with the prescriber and communicate 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 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 Shared decision making resources for clinicians
- 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
- Australian Pharmaceutical Formulary [online]. APF
- 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)

- 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.

safetyandquality.gov.au