



Matthew Frei

# Opioid dependence

## Management in general practice

### Background

Addiction to opioids, or opioid dependence, encompasses the biopsychosocial dysfunction seen in illicit heroin injectors, as well as aberrant behaviours in patients prescribed opioids for chronic nonmalignant pain.

### Objective

To outline the management of opioid dependence using opioid pharmacotherapy as part of a comprehensive chronic illness management strategy.

### Discussion

The same principles and skills general practitioners employ in chronic illness management underpin the care of patients with opioid dependence. Opioid pharmacotherapy, with the substitution medications methadone and buprenorphine, is an effective management of opioid dependence. Training and regulatory requirements for prescribing opioid pharmacotherapies vary between jurisdictions, but this treatment should be within the scope of most Australian GPs.

**Keywords:** substance related disorders; street drugs; general practice; opioid-related disorders



Doctors have managed addiction to opioids with substitution medications since the 1960s,<sup>1</sup> and currently around 41 000 Australians are part of opioid pharmacotherapy programs.<sup>2</sup> The primary care sector is an integral part of the treatment of alcohol and other drug disorders, including opioid dependence. While the numbers of heroin dependent Australians may have fallen since the estimated 74 000 at the end of the last century,<sup>3</sup> an increase in amounts of opioids prescribed for persisting pain disorders<sup>4</sup> means the recognition and management of opioid dependence should be an essential skill for general practitioners.

Opioid dependence is characterised by features of tolerance, withdrawal, and behavioural, social and psychological dysfunction. It is a chronic disorder, with a natural history of remission and relapse that may span many years, with significant associated morbidity and mortality. In managing opioid dependence, GPs can employ skills similar to those used with other chronic illnesses that require sustained modification of behaviour and lifestyle. Opioid pharmacotherapy with methadone solution or sublingual buprenorphine is an evidence supported treatment that allows pharmacological stabilisation of dependence, giving the prescriber the opportunity to engage patients in long term care plans.

### Overcoming barriers to GP treatment of opioid dependence

General practitioners may be reluctant to undertake treatment of opioid addicted patients due to concern about 'that type of patient' in their clinic. They may be worried about being inundated with complex patients. Perception of this group may be coloured by previous experiences of drug seeking presentations where doctors have felt uncomfortable or even been threatened. These fears are magnified if doctors do not believe they are backed up by specialist support.

Opioid prescribers can address these concerns with a comprehensive approach based around opioid maintenance medication. Part of the informed consent process for patients seeking help for opioid use can include clearly structured treatment agreements, with provision for transfer to specialist services if complex behavioural or other issues arise.

Care plans will often involve a supporting treatment team that includes the dispensing pharmacist (*Figure 1*), who plays an



Figure 1. Opioid pharmacotherapies are usually dispensed in a supervised setting, with dosing observed by the dispensing pharmacist

active role in care through supervision of medication and feedback of progress to the prescriber. As with other patients with complex medical problems, difficult patients with opioid addiction may be referred to specialist physicians.

In most primary care settings, the treatment of a small cohort of opioid dependent patients with opioid pharmacotherapy, along with specialist addiction medicine consultation if required, is feasible. A GP equipped with prescribing tools to respond to a patient's opioid addiction is working in a similar way to managing other commonly encountered chronic conditions such as diabetes, depression or cigarette smoking.

Most jurisdictions have specific requirements for training in opioid prescribing (*Table 1*).

## Approach to opioid use presentations

Treatment of opioid addiction should be underpinned by a focus on reduction of harm related to drug use including, but not confined to, a goal of abstinence. This approach recognises that patients with substance use problems may present in a range of levels of motivation, some clearly seeking treatment, while others are ambivalent about changing lifestyle and substance use.

Patients may request drugs of dependence, such as benzodiazepines, stating they require them for symptoms of opioid withdrawal. The presentation may involve aberrant behaviour relating to opioids prescribed for pain, such as requests for dose escalations, 'lost scripts' and worsening pain symptoms.<sup>5</sup> Patients may also present for medical treatment of complications of substance use, such as injection related morbidity. Such presentations are an ideal opportunity for GPs to discuss treatment options such as opioid pharmacotherapy.

As with other medical conditions, assessment of patients with opioid addiction is often part of the initiation of patient-doctor

engagement. A guided history and examination of indicators of severity of opioid or other drug dependence, and a determination of the level of willingness to change will assist in clinical decisions about treatments such as opioid pharmacotherapy. Physical signs such as opioid intoxication or withdrawal as well as biochemical testing (such as urine drug screens) may also help with formulating management plans. *Figure 2* outlines the response to presentations.

## What is opioid pharmacotherapy?

Opioid treatment, with a replacement pharmacotherapy such as methadone solution or high dose sublingual buprenorphine preparations, is associated with reduction in illicit drug use, reduced mortality and improvement in psychosocial functioning.<sup>6-10</sup> Opioid pharmacotherapy medications attenuate withdrawal symptoms and craving, and facilitate engagement of patients in structured, long term treatment, including counselling and management of other health conditions such as blood borne virus infection. Increasing evidence supports the use of opioid replacement pharmacotherapies in the treatment of addiction to pharmaceutical opioids<sup>11</sup> (see *Case study*).

Key issues to discuss with patients considering opioid pharmacotherapy include:

- benefits of treatment and known adverse effects of methadone and buprenorphine
- cost (in most jurisdictions patients must pay a dispensing fee for opioid pharmacotherapies)
- patient requirements, including behavioural expectations, pharmacy attendance for supervised dosing, and medical reviews.

### Table 1. How to become an opioid pharmacotherapy prescriber

Currently, all Australian jurisdictions have requirements for specific training of medical practitioners before prescribing opioid pharmacotherapy with methadone or buprenorphine. These requirements are integrated into the jurisdictions drugs and poisons regulation frameworks. (It is not clear whether this system will be reviewed with national registration of medical practitioners)

Most states and territories require a half to 1 day training workshop before becoming an approved prescriber. Training is free in all states and territories, and trained doctors may have access to ongoing support including mentoring and update courses. Trained GPs can limit numbers of pharmacotherapy patients to suit their practice and may be able to undertake shared care with specialist addiction medicine services

Medical practitioners should contact their state's health department for up-to-date information on training requirements. Further information may also be obtained from The Royal Australian College of General Practitioners and the Australasian Chapter of Addiction Medicine (part of the Adult Medicine Division of the Royal Australasian College of Physicians)



## Methadone and buprenorphine

Methadone is a potent opioid agonist that is used as an analgesic in tablet form. In treatment of opioid dependence it is given once daily in solution, with doses of 60–100 mg generally considered therapeutic<sup>12</sup> (Table 1). Adverse effects of methadone include sedation, sexual dysfunction, sleep disturbance and constipation. As it is metabolised by hepatic CYP enzymes, methadone has several pharmacokinetic drug interactions of significance. Unlike buprenorphine preparations, pregnancy is not a listed contraindication for methadone therapy.

High dose sublingual buprenorphine (Subutex<sup>®</sup>), a partial agonist opioid with a high mu opioid receptor affinity, was approved for use in Australia in 2003 (Table 2). Due to concerns about injection misuse of buprenorphine, a combined preparation of buprenorphine naloxone (Suboxone<sup>®</sup>) is now available. Naloxone is not absorbed significantly sublingually, but may attenuate the euphoric effect of buprenorphine if the tablet is injected, making injection misuse less likely.<sup>13</sup> As buprenorphine may precipitate a withdrawal syndrome by displacing opioid agonists from receptor sites, treatment is commenced when

patients begin to experience withdrawal. One of the useful therapeutic qualities of buprenorphine is a ‘ceiling’ of opioid effects with high doses, and a prolonged duration of effect with dose increases.

Both methadone and buprenorphine are highly effective treatments of opioid dependence, with limited evidence to support the benefit of one over the other based on patient characteristics.<sup>14</sup> Furthermore, these agents are currently under the same regulatory framework in most Australian states and territories. Both drugs carry some risk of toxicity when combined with sedatives such as benzodiazepines or alcohol. However, the partial agonist buprenorphine has a better safety profile and is less likely to cause respiratory depression. Choice of agent usually depends on a range of factors, including patient preference.

### Other treatment options

Opioid dependent patients may present to GPs with a goal of ‘detox’, from opioids. Opioid withdrawal should not be considered a standalone treatment for heroin or other opioid dependence, and unlike opioid replacement pharmacotherapy, opioid withdrawal appears to be associated with poorer outcomes, including risk of overdose.<sup>15,16</sup> However, many patients are reluctant to commence treatment with methadone or buprenorphine, or there may be practical barriers (such as access to dispensing or financial limitations) to this treatment. Some may have a plan to commence antagonist therapy (see below) and/or undertake a long term residential or outpatient rehabilitation program based on abstinence.

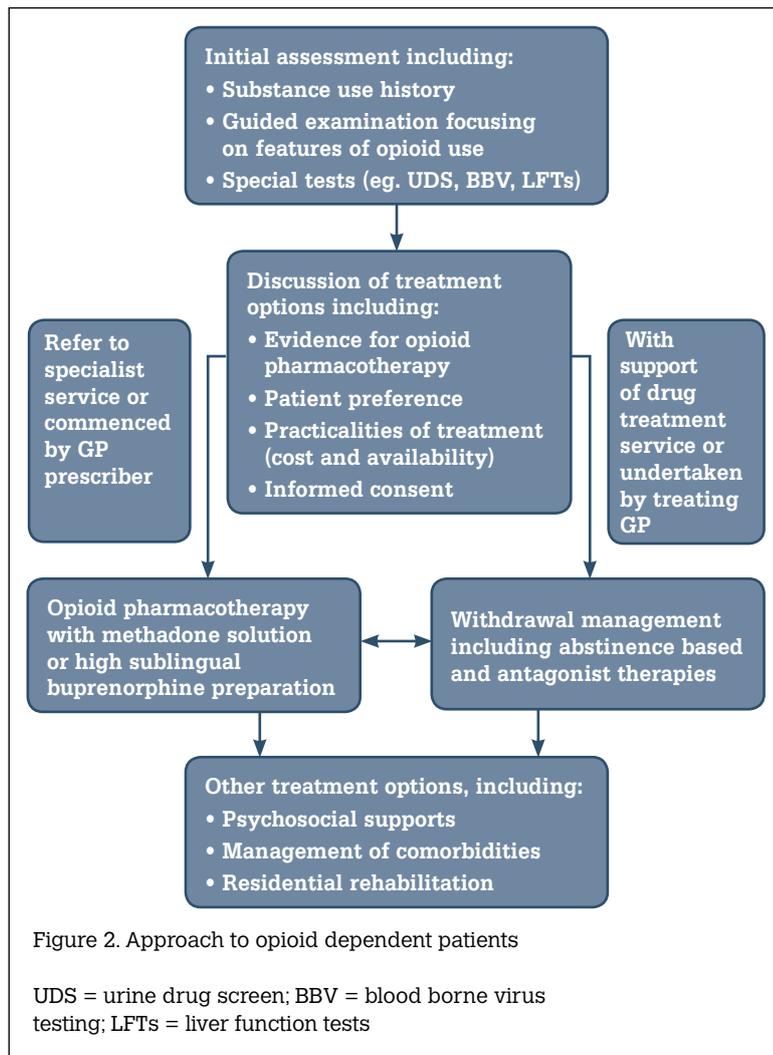


Table 2. Opioid pharmacotherapies		
Agent	Description	Dosing
Methadone solution (Biodone Forte <sup>®</sup> , methadone syrup)	Full agonist opioid in 5 mg/mL solution	Once daily dose, titrated up gradually with therapeutic doses usually in the range of 60–100 mg
Buprenorphine (Subutex <sup>®</sup> )	Partial agonist opioid as 0.4 mg, 2.0 mg and 8.0 mg sublingual tablet	Once daily; higher doses may be given with duration of effect lasting up to several days, induction to therapeutic dose rapid, usually 12–24 mg. Doses up to 32 mg/day may be used
Buprenorphine-naloxone (Suboxone <sup>®</sup> )	Partial agonist opioid with naloxone as 2.0 mg to 0.5 mg and 8.0 mg to 2.0 mg sublingual tablet	



Opioid withdrawal may be treated by GPs with brief courses of symptomatic medications, such as antiemetics, anti diarrhoeals and benzodiazepines. However, opioid pharmacotherapy prescribers have the option of treating with sublingual buprenorphine dispensed daily under supervision, which is effective in managing withdrawal.<sup>17,18</sup> Buprenorphine initiated for opioid withdrawal has the advantage of being able to be continued as long term maintenance therapy in suitable patients.

In addition to its use as an alcohol pharmacotherapy, oral naltrexone is approved for use in opioid dependence as a non-Pharmaceutical Benefits Scheme item. However, adherence to dosing is often poor and evidence for positive outcomes is limited. Implant naltrexone formulations, currently not licensed by Australia's Therapeutic Goods Administration, may be more effective than oral naltrexone or unassisted treatment.<sup>19–21</sup> Until it is licensed in Australia, the use of implant naltrexone should be reserved for clinical research or in specialist settings where other treatments have failed.

## Case study

Mandy is an office worker, 32 years of age, who has been attending the clinic for several years. Her past history is unremarkable: a few bouts of back pain requiring some combination codeine analgesia, and insomnia.

She presents with backache and discloses that she has been using 48 nonprescription codeine-ibuprofen tablets daily for the last 18 months, in addition to intermittent injection use of oxycodone tablets a friend gave her. This is causing problems with work absenteeism. She has tried going 'cold turkey' from these medications but only lasts 48 hours. Mandy asks for medication to help her sleep, manage the pain and get off opioids.

Several of the clinic staff are trained to prescribe opioid pharmacotherapy, and after some discussion of methadone and buprenorphine treatment she agrees to 'give it a go'. After seeking some specialist advice about her case, she is commenced on daily supervised dosing of opioid maintenance treatment. Mandy's management plan also includes investigations for symptoms of reflux and referral to a psychologist.

After 12 months of treatment, Mandy has been abstinent from illicit opioids and is doing well at work. She has attended the psychologist and medical reviews and is able to have some unsupervised doses of her opioid pharmacotherapy. She plans to reduce and cease this medication in the future but is currently happy to stay in treatment.

## Summary of important points

- Opioid addiction is a relapsing remitting disorder, with similarities to other chronic conditions managed in the general practice setting.
- GPs are likely to see patients with pain conditions who have features of addiction.

- Pharmacotherapy with methadone and buprenorphine is an effective intervention for opioid addiction that encourages long term therapeutic engagement and helps patients stabilise and change damaging lifestyles and behaviours.
- Training in prescribing opioid pharmacotherapy is free and offered across Australian states and territories.
- Involvement in the process of change seen with opioid treatment can be a highly rewarding clinical experience for GPs.

## Resources

- The Royal Australian College of General Practitioners Drug and Alcohol Committee: [www.racgp.org.au/vic/dac](http://www.racgp.org.au/vic/dac)
- Australasian Chapter of Addiction Medicine: <http://racp.edu.au/page/australasian-chapter-of-addiction-medicine/>
- Drug and Alcohol Clinical Advisory Service (DACAS) 24 hour telephone support for clinicians staffed by addiction specialists, covering Victoria, Tasmania and Northern Territory: 1800 812 804
- Directline Victoria, support for patients and clinicians: 1800 888 236
- Australia wide alcohol and drug information and services: [www.adin.com.au](http://www.adin.com.au)

## Opiate Dependence Treatment Program

The Australian Government funds the cost of buprenorphine hydrochloride, buprenorphine hydrochloride with naloxone hydrochloride, and methadone hydrochloride supplied as pharmaceutical benefits through clinics and pharmacies approved by state and territory governments.

- VIC – Drugs and Poisons Regulation, Department of Health Victoria administers the regulation of permits for opioid pharmacotherapy: [www.health.vic.gov.au/dpu](http://www.health.vic.gov.au/dpu)
- NSW – Mental Health and Drug and Alcohol Office: 02 9391 9000, email [nswhealth@doh.health.nsw.gov.au](mailto:nswhealth@doh.health.nsw.gov.au)
- ACT – ACT Health Chief Pharmacist: 02 6207 3974, <http://health.act.gov.au>
- SA – Drug and Alcohol Services South Australia: [www.dassa.sa.gov.au](http://www.dassa.sa.gov.au)  
Alcohol & Drug Information Service Clinical Advisory Service: 1300 13 1340
- WA – Drug and Alcohol Office: [www.dao.health.wa.gov.au](http://www.dao.health.wa.gov.au)  
The Clinical Advisory Service is a 24 hour statewide telephone service for doctors or other health professionals: 1800 688 847
- NT – Drug and Alcohol Clinical Advisory Service for health and welfare practitioners: 1800 111 092, [www.health.nt.gov.au](http://www.health.nt.gov.au)
- QLD – Queensland Health's Alcohol, Tobacco and Other Drugs: [www.health.qld.gov.au/atod/](http://www.health.qld.gov.au/atod/)  
Drugs of Dependence Unit monitors the prescription of methadone and buprenorphine within the Queensland Opioid Treatment Program: 07 3328 9890
- TAS – DHHS Pharmaceutical Services Branch: 03 6233 2064, [www.dhhs.tas.gov.au/psbtas/pharmaceutical\\_services](http://www.dhhs.tas.gov.au/psbtas/pharmaceutical_services).

## Recommended reading

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