NSW Clinical Guidelines: Treatment of Opioid Dependence – 2018

ABBREVIATED VERSION
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This document is the Abbreviated Version of the NSW Clinical Guidelines: Treatment of Opioid Dependence. It is intended to be a quick reference guide for practitioners but does not take the place of the complete guidelines.

For more detailed and comprehensive guidance about the treatment of opioid dependence, it is important that practitioners refer to the complete guidelines, which can be downloaded from the NSW Health website at www.health.nsw.gov.au
Section 1
Overview of opioid dependence, treatment approaches and service providers

1.1 Opioid dependence
Opioid dependence is a chronic relapsing remitting condition. It is characterised by:

- regular opioid use
- tolerance to opioids
- impaired control over use
- persistent use despite related harms
- withdrawal syndrome
- relapse upon attempts at stopping opioid use.

People may develop dependence on illicit opiates (e.g. heroin) or on pharmaceutical opioids (e.g. codeine, morphine). The latter often occurs with pain management.

Opioid dependence is associated with increased morbidity and mortality. Patients also often have a range of comorbid medical, psychiatric and social problems. Yet, effective evidence-based treatment options for opioid dependence are available (Figure 1).

Figure 1. Treatment options for people dependent on opioids

```
Patient dependent on opioids

Withdrawal interventions

Opioid Agonist Treatment (OAT)

Withdrawal from OAT

Post-withdrawal and other treatment options
Counselling, case management and support, residential rehabilitation, antagonist (naltrexone) treatment, self-help and peer support programs
```
1.2 Treatment options

Table 1. Opioid dependence treatments

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal services</td>
<td>Short-term interventions (usually 5–14 days) aiming to:</td>
</tr>
<tr>
<td></td>
<td>• interrupt a pattern of heavy use</td>
</tr>
<tr>
<td></td>
<td>• reduce discomfort of withdrawal symptoms</td>
</tr>
<tr>
<td></td>
<td>• link patients to ongoing services</td>
</tr>
<tr>
<td></td>
<td>Available in outpatient, residential or hospital settings</td>
</tr>
<tr>
<td></td>
<td>*NB: withdrawal is not associated with long term opioid cessation</td>
</tr>
<tr>
<td>Opioid Agonist Treatment (OAT)</td>
<td>A longer-term approach (usually months or years) involving:</td>
</tr>
<tr>
<td></td>
<td>• use of methadone or buprenorphine-naloxone¹</td>
</tr>
<tr>
<td></td>
<td>• regular clinical reviews and monitoring</td>
</tr>
<tr>
<td></td>
<td>• psychosocial interventions</td>
</tr>
<tr>
<td>Psychosocial interventions</td>
<td>These include:</td>
</tr>
<tr>
<td></td>
<td>• counselling</td>
</tr>
<tr>
<td></td>
<td>• self-help groups (e.g. Smart Recovery, Narcotics Anonymous)</td>
</tr>
<tr>
<td></td>
<td>• residential rehabilitation programs</td>
</tr>
<tr>
<td>Antagonist-assisted treatment</td>
<td>Involves use of oral naltrexone</td>
</tr>
<tr>
<td></td>
<td>Can be useful for well-motivated patients with good social supports</td>
</tr>
<tr>
<td>Harm reduction services</td>
<td>May be relevant for some patients who continue to use opioids</td>
</tr>
<tr>
<td></td>
<td>Includes needle and syringe programs, peer support and overdose prevention services</td>
</tr>
</tbody>
</table>

Refer also to main guidelines: Table 1 Summary of evidence-based treatment approaches

1.3 Service providers

A range of service providers can be involved in delivering treatment services for opioid dependence, including specialist drug and alcohol services (government and NGO sector), primary care services (GP, allied health, community pharmacy), hospital and other specialist providers (e.g. mental health, pain services).

Opioid dependence is often associated with other harmful patterns of substance use (e.g. alcohol, tobacco, benzodiazepines, cannabis), and other medical, psychiatric and social problems. Addressing these involves coordinated treatment with other health and social service providers over an extended period.

¹ ‘Methadone’ in these guidelines refers to oral methadone. ‘Buprenorphine’ and ‘buprenorphine-naloxone’ refer to the sub-lingual forms of the medicine (i.e. excluding injections or patches). ‘Naltrexone’ refers to oral naltrexone.
Section 2
Medicines – overview of clinical pharmacology

2.1 Buprenorphine

Formulations
Two formulations are registered in Australia for treating opioid dependence:

- Buprenorphine sublingual tablets (Subutex®) containing 0.4, 2, or 8 mg buprenorphine
- Buprenorphine-naloxone combination sublingual film (Suboxone®) containing both buprenorphine and naloxone in dosages of 2 mg buprenorphine and 0.5 mg naloxone, or 8 mg buprenorphine and 2 mg naloxone.

The combined sublingual film is the more commonly used formulation. The addition of naloxone deters injection of the film.

Buprenorphine is also approved for pain management as transdermal patches (Norspan®), low-dose (0.4 mg) sublingual tablets (Temgesic®) and injectable ampoules (Temgesic® Injection).

Clinical pharmacology
Buprenorphine is a semi-synthetic partial opioid agonist with high affinity for μ (mu) opioid receptors. It is effective for opioid dependence because:

- it substitutes for opioids (preventing opioid withdrawal and reducing cravings)
- higher doses (≥16 mg) reduce the effects of additional opioid use (e.g. heroin, morphine)
- it is long-acting, allowing once daily (or even less than daily) dosing.

Peak clinical effects are achieved 1–4 hours after sublingual dosing. It is metabolised principally in the liver by glucuronide conjugation and N-dealkylation, with an elimination half-life of 24–37 hours.

Side effects and safety issues
Side effects are similar to other opioids. The most common being constipation, sedation, drowsiness, sweating, headaches, disturbed sleep, nausea and reduced libido. These are more pronounced when commencing treatment, and usually subside with time.

As a partial agonist, buprenorphine is less likely to cause respiratory depression and overdose compared to full agonist opioids. But, use caution in individuals taking other sedatives (e.g. alcohol, benzodiazepines), and in those with low or uncertain opioid tolerance.

The initial dose of buprenorphine can precipitate opioid withdrawal in opioid dependent patients who have recently used a full opioid agonist. This happens because buprenorphine is a partial agonist and has a higher receptor affinity, therefore it is able to displace a full agonist and bind strongly to an opioid receptor. However, it cannot activate the receptor to the same extent. This is avoided by delaying the first buprenorphine dose until the patient is experiencing opiate withdrawal.
Key drug interactions

Table 3. Drug interactions with buprenorphine

<table>
<thead>
<tr>
<th>Drug</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other sedatives</td>
<td>Large doses of other sedative drugs (e.g. alcohol, benzodiazepines) combined with buprenorphine can cause respiratory depression, sedation, coma and death</td>
</tr>
<tr>
<td>Opioid agonists (analgesia)</td>
<td>Buprenorphine (particularly at doses &gt;16 mg) reduces the analgesic effects of full agonist opioids</td>
</tr>
<tr>
<td>Opioid antagonists</td>
<td>Naltrexone and buprenorphine can have unpredictable effects together (seek specialist assistance) High naloxone doses (e.g. 4 to 10 mg) and prolonged ventilatory support may be required to reverse buprenorphine overdose</td>
</tr>
</tbody>
</table>

Withdrawal from buprenorphine

Opioid withdrawal symptoms typically emerge 2–5 days after stopping treatment. They may persist for several weeks, particularly after long-term (maintenance) treatment. Often (but not always) symptoms are described as milder than with withdrawal from other opioids (e.g. morphine, methadone). Relapse may occur after withdrawal from buprenorphine treatment, opioid overdose risks increase after treatment.

2.2 Methadone

Formulations

Oral methadone is available in Australia for opioid dependence as a liquid or solution in 5 mg/mL (Methadone Syrup® and Biodone Forte®). Methadone is also available as 10 mg oral tablets for pain management (Physeptone®).

Clinical pharmacology

Methadone is a potent synthetic opioid agonist. It is well absorbed orally and has a long (although variable) duration of action. Its effects are qualitatively similar to those of morphine and other opioids. Methadone is effective for opioid dependence because:

- it substitutes for opioids (preventing opioid withdrawal and reducing cravings)
- it has a long duration of action and is usually taken in a single daily dose
- higher methadone doses (>60–80 mg) reduce the effects of additional opioids (e.g. heroin).

Effects of methadone start 30–60 minutes after oral dosing, with peak effects occurring at 2–4 hours. It has a half-life of 15–30 hours. Steady state equilibrium is achieved after 3–7 days of daily dosing, with cumulative effects over this time. Methadone is metabolised by the hepatic cytochrome (CYP450) enzyme system to inactive metabolites.
Side effects and safety issues

Side effects are similar to other opioids. The most common being constipation, disturbed sleep, sedation, drowsiness, sweating, headaches, nausea and reduced libido. These are more pronounced when commencing treatment, and usually subside with time.

Methadone toxicity (severe sedation, respiratory depression, death) in the early stages of treatment has been related to:

- concomitant use of other drugs, particularly sedatives
- inadequate assessment of tolerance and/or inadequate supervision of methadone dosing
- commencement on doses that are too high for the level of tolerance, and/or rapid dose increases that do not factor the cumulative effect of methadone
- individual variation in metabolism of methadone.

Key drug interactions

Table 4. Drug interactions with methadone

<table>
<thead>
<tr>
<th>Drug</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other sedatives</td>
<td>Other sedative drugs (e.g. alcohol, benzodiazepines) combined with methadone can cause respiratory depression, sedation, coma and death</td>
</tr>
<tr>
<td>CYP450 inducers (e.g. carbamazepine, phenytoin)</td>
<td>CYP450 inducing drugs can increase the metabolism of methadone and cause an opioid withdrawal syndrome</td>
</tr>
<tr>
<td>CYP450 inhibitors (e.g. amiodarone, fluvoxamine)</td>
<td>CYP450 inhibitors can decrease the metabolism of methadone and cause overdose</td>
</tr>
<tr>
<td>Opioid agonists (analgesia)</td>
<td>High dose methadone (&gt;60–80 mg) reduces the analgesic effects of other opioids</td>
</tr>
<tr>
<td>Opioid antagonists and partial agonists</td>
<td>Antagonists (e.g. naltrexone, naloxone) and partial agonists (e.g. buprenorphine) can precipitate withdrawal in methadone maintained patients</td>
</tr>
<tr>
<td>Medicines prolonging QTc interval</td>
<td>These may have clinical implications when used with methadone</td>
</tr>
</tbody>
</table>

Withdrawal from methadone

This tends to emerge later (36–48 hours after the last dose) and be more prolonged (typically 7–21 days after last dose) than with short-acting opioids. Some withdrawal features (dysphoria, cravings, sleep disturbances) persist for weeks to months. Relapse may occur after withdrawal from methadone treatment, opioid overdose risks increase after treatment.
2.3 Naltrexone

Naltrexone is approved as 50 mg oral tablets for treatment of opioid dependence (and also for alcohol dependence). Naltrexone is an opioid antagonist and blocks the effects of other opioids (including heroin and opioid analgesics).

It should only be administered after completion of opioid withdrawal, and usually in consultation with an addiction medicine specialist. There is an increased risk of overdose with resumption of opioid use after ceasing naltrexone.

2.4 Cost of medicines

The methadone and buprenorphine formulations used in treating opioid dependence are funded under the S100 PBS scheme. This means that whilst medicines are provided free to the dispensing pharmacy, patients usually have to pay for the cost of dispensing services in private facilities such as community pharmacies and private clinics. However, in the public sector, which is targeted to patients with complex treatment needs, there is no cost to patients.

Oral naltrexone is not subsidised under the PBS for the treatment of opioid dependence (but is for alcohol dependence, reflecting its greater cost effectiveness in treating alcohol dependence).
Section 3
Assessment

A comprehensive assessment is needed. It aims to identify the pattern of substance use, key medical, psychiatric and social complications, and examine patient treatment goals and preferences. It may take several appointments to complete.

Referral or consultation with a specialist is recommended for patients with complex presentations, or where the primary care provider does not have adequate time or resources to assess the patient and initiate treatment.

Presenting complaint
The reason for presentation will impact upon immediate treatment goals.

History of substance use and previous drug and alcohol treatment

Table 5. Assessing substance use and treatment

<table>
<thead>
<tr>
<th>History</th>
<th>Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid use</td>
<td>Quantity, frequency, route of administration, use last 3 days, duration of this episode</td>
</tr>
<tr>
<td>Features and severity of dependence</td>
<td>Evidence of tolerance, withdrawal, age of first use and first regular use, periods of abstinence, ability to control use, drug-related harms</td>
</tr>
<tr>
<td>Risk behaviours</td>
<td>Including polydrug intoxication, history of overdoses, injecting practices.</td>
</tr>
<tr>
<td>Use of other drugs and other substance use disorders</td>
<td>Including alcohol, benzodiazepines, cannabis, psychostimulants and tobacco</td>
</tr>
<tr>
<td>Prior attempts at drug and alcohol treatment</td>
<td>What the patient feels has ‘worked’ and has ‘not worked’ before</td>
</tr>
</tbody>
</table>

Use of the validated outcome measure the ATOP (Australian Treatment Outcomes Profile) can assist in assessment and keeping track of progress.²

Medical and psychiatric history
Assess medical and psychiatric history including risk of harm to self or others. Paying particular attention to unstable or active conditions that may complicate or require treatment. Ensure to ask about pregnancy and contraception.

Social circumstances
This includes home environment, social supports, employment, financial and legal issues, child protection or domestic violence concerns and barriers to change.

² The ATOP is a psychometrically valid instrument for the measurement of treatment outcomes in Australian opioid treatment populations and can feasibly be implemented as part of routine clinical practice in specialist opioid treatment program clinics.
Motivations and goals for treatment

Selecting the right treatment requires understanding the reasons for seeking treatment and of patient goals and expectations.

Examination

Table 6. Clinical assessment

<table>
<thead>
<tr>
<th>Examine</th>
<th>Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vital signs</td>
<td>Blood pressure, pulse, respiratory rate, temperature</td>
</tr>
<tr>
<td>Signs of drug use</td>
<td>Evidence of intoxication* or withdrawal† from opioids or other drugs</td>
</tr>
<tr>
<td></td>
<td>Evidence of drug use and related complications (e.g. injection sites, hepatic disease, infections)</td>
</tr>
<tr>
<td>Mental state</td>
<td>Brief cognitive screen, Mental Status/Mini Mental Status examination</td>
</tr>
</tbody>
</table>

*Features of opioid intoxication include: sedation, drowsiness, pinpoint pupils, shallow breathing, bradycardia, low blood pressure.
†Features of opioid withdrawal include: anxiety, agitation, dysphoria, poor sleep, headaches, muscle and joint pain, runny nose, watery eyes, dilated pupils, yawning, poor appetite, nausea, vomiting, sweating, goose bumps, hot & cold flushes, diarrhoea, abdominal cramps, tachycardia, elevated blood pressure.

Investigations

Urinary drug screens can be helpful in confirming or clarifying recent substance use.

Viral serology (HIV, HBV, HCV) should be considered with appropriate counselling and follow-up.

Patients with viral or alcoholic hepatic disease require periodic monitoring of liver function.
Section 4
Treatment planning

Informed consent is important in this area of health care. Patients should understand the implications of different treatment options, including potential risks and benefits, side effects, financial and other commitments.

Considering cognition, literacy, language and cultural factors, provide:

- written information
- opportunities to ask questions
- alternative communication methods if necessary.

Many patients and families present for treatment seeking quick solutions. However, the chronic nature of opioid dependence means that effective treatment usually requires longer-term treatment approaches, such as Opioid Agonist Treatment (OAT), long-term participation in psychosocial services or self-help programs.

Treatment planning should involve the patient, reflecting their preferences, circumstances and case complexity. It will also often involve coordination across multiple health and welfare providers. A treatment care plan that addresses the client’s substance use, physical and mental health and social issues should be developed and documented for patients.
Section 5
Opioid Agonist Treatment (OAT)

The key elements of OAT are:

- safe and effective use of medicine
- regular clinical reviews and monitoring
- participation in psychosocial interventions
- addressing medical, psychiatric and social comorbidities.

Written informed consent and an authority from Pharmaceutical Regulatory Unit (PRU) are required prior to commencing OAT.

5.1 Buprenorphine dosing guidelines

Commencing buprenorphine for patients using short-acting opioids (e.g. heroin, oxycodone, codeine)

Treatment may be commenced in a community setting (GP, pharmacy) for low-risk patients (i.e. no significant other substance use or other comorbidity) where there are adequate levels of clinical supervision in the initial 2–4 weeks of treatment. Refer to specialist services where these conditions are not met.

Delay the first buprenorphine dose until the patient is experiencing mild to moderate opioid withdrawal (usually >8–12 hours after last opioid use) to avoid precipitated withdrawal.

Table 7. Initial buprenorphine dose

<table>
<thead>
<tr>
<th>Level of withdrawal</th>
<th>First dose of buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate or severe withdrawal*</td>
<td>8 mg</td>
</tr>
<tr>
<td>Mild withdrawal†</td>
<td>4 mg and then a further 4 mg after 1-2 hours</td>
</tr>
</tbody>
</table>

*Demonstrated by physical signs of opioid withdrawal such as dilated pupils, sweating, goose bumps. †Demonstrated by subjective withdrawal symptoms (anxiety, abdominal cramps, cravings, hot/cold flushes) but no obvious physical signs such as dilated pupils, goose bumps, lacrimation, rhinorrhoea, sweating.

Consult with specialist before commencing buprenorphine in patients with uncertain substance use history, degree of opioid tolerance, significant polydrug use or medical complications. Usually these patients are cautiously commenced on 2–4 mg initial dose and then monitored closely.

Buprenorphine may be subsequently increased by 2, 4 or 8 mg increments each day, as required. Titrate dose following review of:

- side effects
- features of withdrawal (suggesting ‘not enough’ buprenorphine)
- features of intoxication (suggesting other drug use or ‘too much’ buprenorphine)
- ongoing cravings
- other substance use.

Effective maintenance doses (e.g. 12–24 mg daily) should usually be achieved within several days.

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3 Daily review by pharmacist in first 3–5 days, with review by prescriber every 3–5 days during first 2 weeks.
Transfer from long-acting opioids to buprenorphine (e.g. methadone, slow-release preparations)

Transfer may be associated with precipitated withdrawal or destabilisation of patient’s medical, psychiatric or psychosocial condition. Transfer may occur as an outpatient in patients at low risk of complications\(^4\) and where there is adequate clinical supervision available.\(^5\) Refer to specialist services where these conditions are not met (high-risk transfers, inadequate clinical supervision).

Refer to Clinical Guidelines for details on transferring from methadone to buprenorphine.

Buprenorphine maintenance dosing

Effective maintenance doses are usually between 12–24 mg per day, although some patients require higher (up to 32 mg) or lower (4–8 mg) daily doses. Adjust doses by 2–8 mg per day in response to:

- medicine effects (withdrawal from inadequate dose, side effects from too high a dose)
- continued drug use – increasing buprenorphine dose may be an effective response to continued non-medical opioid use, but it has a limited role in responding to other drug use (e.g. alcohol, benzodiazepines, stimulants)
- persistent side effects (that may require dose adjustment)
- patient report of dose adequacy and treatment goals.

The recommended maximum daily buprenorphine dose is 32 mg. Alternate day dosing (usually double the daily dose administered every 2 days) can be tolerated by most patients to reduce attendance requirements.

5.2 Methadone dosing guidelines

Commencing methadone treatment

Methadone treatment may be commenced in a community setting (accredited prescriber and pharmacy) for low-risk patients (i.e. no significant other substance use or other comorbidity) where there are adequate levels of clinical supervision in the initial 2–4 weeks of treatment.\(^6\) Refer to specialist services where these conditions are not met.

Initial dose

Table 8. Initial methadone dose

<table>
<thead>
<tr>
<th>Patient factors</th>
<th>Starting dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established opioid dependence</td>
<td>20–30 mg</td>
</tr>
<tr>
<td>No significant medical comorbidity or high-risk use of other drugs (in particular sedatives such as alcohol and benzodiazepines)</td>
<td></td>
</tr>
<tr>
<td>Low/uncertain levels of opioid dependence</td>
<td>15–20 mg</td>
</tr>
<tr>
<td>Significant medical comorbidity or high-risk use other drugs (in particular sedatives such as alcohol and benzodiazepines). For such patients, consult with specialist</td>
<td></td>
</tr>
</tbody>
</table>

\(^4\) No previous experience of significant precipitated withdrawal during transfer; methadone dose ≤60 mg, patient experiencing withdrawal with current methadone dose, no non-medical opioid use or unstable use of other drugs, no severe active medical or psychiatric conditions, supportive social conditions; good understanding by client of transfer process.

\(^5\) Ability for clinician (doctor, nurse, pharmacist) to review client at least twice during the first day, and daily on subsequent 2–3 days.

\(^6\) Daily review by dosing pharmacist in first 3–5 days, with review by prescriber every 3–5 days during first 2 weeks.
**Frequent reviews**
A clinician on the treatment team (prescriber, pharmacist, nurse, case worker) should review the patient daily during first 3–5 days for evidence of intoxication, withdrawal, other substance use and side effects. The prescriber should also review the patient once or twice per week until the dose stabilises.

**Titrating dose**
Adjust dose every 3–5 days by 5–10 mg increments, as required. Adjust the dose following:

- review of side effects
- features of withdrawal (suggesting ‘not enough’ methadone)
- features of intoxication (suggesting other drug use or ‘too much’ methadone)
- ongoing cravings
- other substance use
- missed doses or dose diversion.

Do not increase dose more frequently than every 3 days or by more than 10 mg increments without specialist consultation. Effective maintenance doses (e.g. 60–80 mg daily) should usually be achieved within several weeks of commencing methadone treatment.

**Methadone maintenance dosing**
Effective methadone maintenance doses are usually between 60–120 mg per day, although some patients require higher (up to 150 mg) or lower (20–30mg) doses. Adjust doses by 5–10 mg every 3–5 days in response to:

- medicine effects (withdrawal from inadequate dose, side effects from too high a dose)
- continued drug use – increasing dose of methadone may be effective in response to continued non-medical opioid use, but has a limited role in responding to other drug use (e.g. alcohol, benzodiazepines, stimulants, cannabis)
- persistent side effects (that may require dose adjustment)
- patient report of dose adequacy and treatment goals
- frequently missed doses or dose diversion.

The recommended maximum daily dose of methadone is 150 mg.

**5.3 Clinical reviews and monitoring**
Regular clinical reviews are an essential component of safe and effective treatment. Frequency of reviews relates to stage of treatment, patient complexity and other health issues. Reviews should typically occur every 3–5 days during the first two weeks, then once or twice weekly until substance use and other issues have stabilised, and every 1-2 months thereafter.

A longer comprehensive treatment plan review should occur at regular intervals (at least every 6 months), and may also need to occur following a significant change in the patient’s circumstances (e.g. other health or social issues), or if there are concerns that the current treatment plan is not effective in adequately addressing the patient’s goals.

This involves examining longer-term goals and treatment plans addressing broader health and social issues, screening and prevention activities, and consideration of cessation of medicine.
Clinicians should regularly liaise with dosing sites to review attendance, intoxicated presentations or other concerns.

Urine drug screens (UDS) should be performed periodically to objectively identify recent substance use and enhance validity of patient self-reported substance use.

### 5.4 Psychosocial services

All patients should be actively encouraged to participate in psychosocial services. Counselling is particularly relevant for those with other problematic substance use, concurrent mental health (e.g. depression, anxiety) or chronic pain conditions, and for those considering withdrawal from OAT.

Patients may also benefit from a range of social services addressing issues such as employment, housing, child rearing, domestic violence, legal and finances. These should be periodically reviewed as part of coordinated care planning. Patients with severe social disruptions may benefit from longer-term residential rehabilitation programs whilst stabilising on OAT medicine. (Refer to Alcohol & Drug Information Service – ADIS).

### 5.5 Addressing continued high-risk substance use

Attempts should be made to address high-risk substance use (as identified by patient self-report, UDS, intoxicated presentations, overdoses, chaotic drug-related behaviours, or deterioration of social, medical or mental states). Responses include:

- examining patient goals of treatment
- ensuring that an adequate dose of buprenorphine or methadone is prescribed and that the patient is taking it as prescribed (this may require reducing takeaway doses)
- addressing medical, psychiatric or social conditions that may contribute to substance use
- reviewing the role of psychosocial interventions (e.g. counselling, residential rehabilitation programs).

Consult with specialist services for patients with persistent high-risk substance use.

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**Table 9. Clinical review**

<table>
<thead>
<tr>
<th>Review</th>
<th>Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient circumstances</td>
<td>General health, substance use, social circumstances, relevant risk factors (e.g. child protection, harm to self or others, overdose, domestic violence, injecting risks)</td>
</tr>
<tr>
<td>Current treatment conditions</td>
<td>Attendance for dosing, adequacy of dose, side effects, takeaway conditions (unsupervised/dispensed doses), current prescription details, participation in psychosocial interventions (counselling)</td>
</tr>
<tr>
<td>Treatment plan</td>
<td>Attendance to health and welfare issues and engagement with other services</td>
</tr>
</tbody>
</table>
5.6 Addressing comorbidities and pregnancy

Patients often have a range of medical, psychiatric and social conditions that should be reviewed regularly and addressed in a coordinated treatment plan with other service providers. Patients with significant comorbidity and/or complex presentations should be referred to specialist services.

Methadone and buprenorphine are generally considered safe medicines in pregnancy and during breastfeeding. Women who are pregnant are usually referred to specialist OTP and/or perinatal services.

5.7 Driving a motor vehicle or operating heavy machinery

Driving or operating heavy machinery after dosing with methadone or buprenorphine is not associated with increased risk of accident or injury provided the patient is on a stable dose of the medication and is not using significant amounts of other psychoactive drugs (particularly alcohol, benzodiazepines or cannabis).

Assessing and managing short-term fitness to drive

Patients should not drive motor vehicles or operate heavy machinery until their commencing opioid agonist dose is stable and a steady state serum drug level has been achieved, and for several days following any subsequent significant dose increase.

Most patients initiating treatment with sublingual buprenorphine should be advised to not drive during the first two weeks of treatment. Patients should also be advised to be cautious in the 3 to 5 days after any dose change, or if attempting ‘two or three day’ dosing.

For patients initiating methadone treatment, patients should be advised to not drive in the first four weeks of treatment. Patients should also be advised to be cautious in the 3 to 5 days after any significant dose change (greater than 5mg).

All health professionals have a responsibility to advise patients of the effect methadone and buprenorphine may have on driving safety, and to advise patients to arrange alternate transport until a stable treatment dose and steady state are achieved.

If at any time a patient attends for treatment and is intoxicated, health professionals should address safety concerns (see Section 2.4.9 Intoxicated presentations) and advise the patient to not drive a motor vehicle. This should be documented in the patient’s medical records. If a patient does intend to drive when intoxicated, then police may be contacted.

Assessing long-term medical fitness to drive

The law requires drivers to report to Roads and Maritime Services any permanent or long-term illness that is likely to affect their ability to drive safely.

All health professionals involved in a patient’s treatment have a responsibility to assess and advise patients of their risk of impaired driving in accordance with the national Assessing Fitness to Drive - for commercial and private vehicle drivers standards.

The risk of impaired driving is likely to increase if:

- the patient is using alcohol or other prescribed or illicit drugs, particularly psychoactive medications such as benzodiazepines, antidepressants, pregabalin, or antipsychotics; or illicit drugs such as cannabis or amphetamines;
- the patient has other medical conditions that may impair driving, such as cognitive impairment, sleep disorders resulting in fatigue, severe pain, or seizures.

Prescribers should consider all relevant clinical information, bearing in mind the compounding effect each condition, medication or substance may have on the overall capacity of the patient to control a vehicle, to act in an appropriate and timely way for the road and traffic conditions, and to safely operate machinery.
Assessment in line with the Assessing Fitness to Drive standards should be completed at key points during opioid treatment.

At each driving safety assessment, prescribers should document their assessment and discussions with the patient, the reasons for their medical decision-making and any actions taken, including advice provided to the patient.

Key points where a driving safety assessment is warranted include:

- when commencing patients on treatment;
- when treatment doses are substantially increased; or
- whenever a health professional becomes aware that a patient may be at substantial risk of impaired driving (for example, where the patient is continuing to use other sedatives, or is not engaged consistently in treatment).

Patients rely on health professionals to advise them if a permanent or long-term injury or illness may affect their ability to drive safely. Prescribers should advise patients of their responsibility to report to Roads and Maritime Services if their long-term or permanent injury or illness may affect their ability to drive safely.

Health professionals also have an obligation to public safety, so if a health professional believes that a patient is not following advice to cease driving, the health professional may report directly to Roads and Maritime Services.

Roads and Maritime Services have the responsibility to make all decisions regarding the licensing of drivers. If a patient does not meet the medical standards for an unconditional licence, they may meet the criteria for a conditional licence as outlined in Assessing Fitness to Drive.

5.8 Intoxicated presentations and missed doses

Intoxicated patients should not be dosed. Dosing staff should notify the prescriber of intoxicated presentations. This will prompt a clinical review of the patient.

Clinician/dosing point staff to make assertive attempts to make contact with missing patients, particularly during induction period.

Patients who have missed 1–3 consecutive days of dosing should be reviewed by the dosing clinician (pharmacist or nurse), and if there are no clinical contraindications (e.g. intoxication, significant illness), the usual dose should be provided, and the prescriber notified of the absence.

Patients who have missed 4 or 5 consecutive days should be reviewed by the dosing clinician (pharmacist or nurse), and prescriber should be contacted. If there are no contraindications (e.g. intoxication, significant illness) then the prescriber may authorise a reduced dose (e.g. if the patient is on buprenorphine, then half the usual daily dose or 8 mg; if the patient is on methadone, then half the usual daily dose or 40 mg), and incrementally return to the usual daily dose over the subsequent 2–3 days for buprenorphine, and 5–7 days for methadone.

Patients who regularly miss doses having already stabilised also require review. Clinically review and reduce dose for patients who frequently miss individual methadone doses (e.g. only attend 3-4 doses out of every 7 days.

Patients who have missed more than 5 consecutive doses should be reviewed by the prescriber to identify reasons for absence, current circumstances and goals, and re-induction into treatment.
5.9 Takeaways and unsupervised dosing

At the start of OAT, dosing is supervised at a pharmacy or clinic. Supervised dosing enhances safety and medicine adherence, reduces risk of diversion to others and enables better monitoring. However, regular supervision can be intrusive upon work or other commitments, increases the cost and inconvenience of treatment, and can be associated with treatment drop-out for some patients.

There is the capacity for takeaway doses (i.e. dispensed doses to be taken for later consumption) and unsupervised dosing (i.e. dispensing of medicine without regular supervision of doses, and reserved for Suboxone® only).

Decision making regarding the level of supervision requires regular assessment and documentation of:

- indication for takeaways or unsupervised dosing
- risk assessment of harms of unsupervised doses, requiring regular review of
  - stability of opioid medication (unstable or missed doses, aberrant medication behaviours)
  - adherence to other treatment conditions (attendance at appointments, UDS on request)
  - use of other substances
  - other medical, psychiatric or social conditions (e.g. cognitive impairment, suicidal ideation, homelessness, risk of children accessing takeaway dose) that impact upon medication adherence and/or safety
- risk mitigation strategies to minimise potential harms of takeaways.

(For further information on Potential harms associated with takeaway doses, refer to Table 19 in the main guidelines.)

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7 Reasons for takeaways or unsupervised dosing: travel, work, recreational activities.
8 Risks associated with takeaways: diversion to others, injecting or other aberrant medication behaviours, overdose
9 Risk mitigation strategies: patient education, safe storage, avoid unsupervised buprenorphine tablets, dilution of methadone takeaway doses, involvement of responsible carers, regular clinical reviews and monitoring.
The framework for takeaway provision for buprenorphine-naloxone and methadone is shown below. (Table 10)

**Table 10. Summary of NSW takeaway guidelines**

<table>
<thead>
<tr>
<th></th>
<th>Methadone</th>
<th>Buprenorphine-naloxone (Suboxone®)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Induction and stabilisation period (usually first 3 months of treatment)</strong></td>
<td>Supervised dosing</td>
<td>Supervised dosing</td>
</tr>
<tr>
<td></td>
<td>No takeaway doses except special circumstances</td>
<td>No takeaway doses except special circumstances</td>
</tr>
<tr>
<td><strong>Maintenance phase: Takeaway availability based on risk assessment</strong></td>
<td><strong>High risk</strong> Supervised dosing</td>
<td>Supervised dosing</td>
</tr>
<tr>
<td></td>
<td>No takeaway doses except special circumstances</td>
<td>No takeaway doses except special circumstances</td>
</tr>
<tr>
<td></td>
<td><strong>Moderate risk</strong> 0-2 takeaways per week</td>
<td>Consider if take away doses should be consecutive</td>
</tr>
<tr>
<td></td>
<td>Consider if take away doses should be consecutive</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Low risk</strong> 2-4 takeaways per week</td>
<td></td>
</tr>
</tbody>
</table>

5.10 Withdrawal from OAT

Many patients are keen to cease OAT, but this can be associated with uncomfortable withdrawal symptoms, relapse to substance use, deterioration in health and general wellbeing, overdose and increased mortality. Cessation of OAT should generally be under conditions of informed consent, and requires planning for successful outcomes.\(^{11}\)

Patients should be clinically reviewed regularly and treatment plans appraised. Withdrawal from OAT takes several months for most patients. Seek specialist advice as required.

- **Methadone dose reductions** – most patients tolerate 5-10% dose reductions (5-10 mg reductions for doses > 50mg, 2.5-5 mg reductions for doses ≤50 mg) every 1 to 4 weeks
- **Buprenorphine dose reductions** – most patients tolerate up to 25% dose reductions (4-8 mg reductions for doses >16 mg; 2-4 mg reductions for doses ≤16mg) every 1 to 4 weeks.

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\(^{10}\) Buprenorphine usually has greater takeaways restrictions than the combination product. Moderate/low-risk patients can receive 0-4 takeaways and unsupervised dosing may be considered for pregnant or breastfeeding women.

\(^{11}\) Predictors of successful cessation of OST: how withdrawal is attempted, no unstable or problematic substance use, stable medical, psychiatric and social conditions.
Section 6
Managing opioid withdrawal

The management of opioid withdrawal includes: supportive care, medicine and links to ongoing treatment and support services.

Table 11. Opioid withdrawal syndrome

<table>
<thead>
<tr>
<th>Symptoms</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cravings (strong desire to use)</td>
<td>runny nose</td>
<td>nausea</td>
</tr>
<tr>
<td>anxiety</td>
<td>watery eyes</td>
<td>vomiting</td>
</tr>
<tr>
<td>agitation</td>
<td>dilated pupils</td>
<td>diarrhoea</td>
</tr>
<tr>
<td>restlessness</td>
<td>sweating</td>
<td>abdominal cramps</td>
</tr>
<tr>
<td>dysphoria</td>
<td>goose bumps</td>
<td>tachycardia</td>
</tr>
<tr>
<td>poor sleep</td>
<td>hot and cold flushes</td>
<td>elevated blood pressure</td>
</tr>
<tr>
<td>muscle and joint pain</td>
<td>poor appetite</td>
<td>yawning</td>
</tr>
<tr>
<td>headaches</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Although opioid withdrawal is unpleasant, it is not life threatening unless there is serious underlying illness. Hallucinations and seizures are not typical of opioid withdrawal and suggest other causes.

Withdrawal from short-acting opioids (e.g. heroin, oxycodone, codeine) generally starts within 8–24 hours of last use, peaks at 48–72 hours, and largely subsides within 5–7 days. Some symptoms (e.g. disturbed sleep and mood, cravings) may persist for weeks.

6.1 Planning withdrawal

In most cases, opioid withdrawal can be safely completed as an outpatient with sufficient supports. Patients with severe or unstable medical or psychiatric conditions may require hospitalisation. Residential services may be warranted for the patient with unsupportive home environment (e.g. other drug users, few supports) or recent failed outpatient attempts.

Patients with unclear substance use, significant polydrug use significant medical or psychiatric conditions and/or pregnancy should be referred for specialist assessment.

6.2 Supportive care

Supportive counselling focuses upon coping with cravings, withdrawal symptoms and maintaining motivation. Patients can also access 24-hour telephone counselling from ADIS. Patients should be offered written information from services as appropriate.

Other supportive actions include:

- recommending that patients avoid dehydration (i.e. ensure fluid intake), avoid excessive caffeine and alcohol, and eat multiple small meals
- conducting daily reviews (face to face, telephone) with a health worker (e.g. GP, drug and alcohol worker or nurse)
- developing plans for dealing with complications and identifying contact details for support (e.g. drug and alcohol worker, GP or locum, pharmacist, ADIS)
- warning patients regarding overdose – decreased tolerance after even a short period of abstinence can lead to overdose if the same quantities of opioids are used as before. Mixing medicines with alcohol or other sedatives (e.g. benzodiazepines) can also lead to overdose.
6.3 Withdrawal medication

Buprenorphine-naloxone is the preferred medicine, although methadone\textsuperscript{12} or symptomatic medicines\textsuperscript{13} may be used where buprenorphine is unavailable or contraindicated.

Attempt a short-term (5-14 day) regime depending upon factors such as duration of inpatient admission. Review progress within a few days.

Longer-term OAT (with buprenorphine or methadone) is recommended for patients who:

- cannot stop or markedly reduce their opioid use during the withdrawal episode
- relapse into regular opioid use as the dose of buprenorphine is reduced or ceased
- do not feel confident about maintaining abstinence and want to avoid relapse to opioid use.

See Section 5.1 for buprenorphine induction details. Delay the first dose until the patient is experiencing early features of opioid withdrawal. Monitor patient regularly and titrate doses against withdrawal severity, cravings, side effects and other drug use (see Table 12 for typical outpatient regimen). Other medicines (e.g. benzodiazepines, anti-emetics) are usually not required, or only used sparingly.

Supervise dosing over the treatment episode. Withhold the medicine if patient intoxicated.

Table 12. Example of 14 day outpatient buprenorphine-naloxone dosing regimen for withdrawal from short-acting opioids (e.g. heroin)

<table>
<thead>
<tr>
<th>Day</th>
<th>Buprenorphine-naloxone dose (sublingual, mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8 mg at onset opiate withdrawal</td>
</tr>
<tr>
<td>2–4</td>
<td>Titrate dose so that patient comfortable and not using additional opioids (e.g. heroin) Typically require doses between 8–16 mg daily</td>
</tr>
<tr>
<td>5–14</td>
<td>Review patient progress regularly and adjust dose Aim to reduce daily dose by 2–4 mg every 1–2 days* Aim for last 1–2 days of dosing to be on 2 mg dose Patient may experience a mild increase in withdrawal discomfort in the 2–3 days after last dose</td>
</tr>
</tbody>
</table>

*Review patient treatment plan regularly. If plan is to continue longer-term buprenorphine (OAT), then increase buprenorphine dose to effective range (e.g. usually 8 mg or more).

6.4 Links to ongoing treatment and support

Withdrawal treatment can be a life-saving intervention for some patients, however on its own rarely results in long-term abstinence. Ongoing participation in treatment (e.g. counselling, OAT, residential rehabilitation, self-help, naltrexone) is usually required to achieve long-term changes. Patients should also be linked to services addressing broader health and welfare needs.

\textsuperscript{12} Reducing doses over 10-20 day period, commencing at 20-30mg and reducing by 2.5mg every 1-2 days
\textsuperscript{13} Antiemetic (e.g. metoclopramide 10 mg QID for up to 3–4 days); antidiarrhoal (e.g. atropine and diphenoxylate 1-2 tablets TDS for up to 3–4 days); antispasmodic (e.g. hyoscine butylbromide 10-20 mg QID for up to 3–4 days); anti-inflammatory (e.g. ibuprofen 400 mg QID for up to a week); low-dose benzodiazepines can be useful but are not recommended beyond 3–5 days (e.g. diazepam 5 mg BD for 2/7; then 5 mg nocte for 2/7)
Section 7
Regulatory and administrative issues

7.1 Accreditation of prescribers

Accredited prescribers

In order to prescribe opioids to up to 200-300 patients, prescribers are required to complete the Opioid Treatment Accreditation Course (OTAC)\textsuperscript{14} and clinical workplace assessment.

Unaccredited medical practitioners

Methadone: Unaccredited medical practitioners may apply to the PRU for an individual patient authority to prescribe for up to ten (10) low-risk patients who are being transferred from an accredited prescriber. Unaccredited medical practitioners should engage with the previous accredited prescriber, or seek advice from the Drug and Alcohol Specialist Advisory Service (DASAS) if significant changes to treatment are required or the patient’s risk assessment changes adversely.

Buprenorphine and buprenorphine-naloxone: Unaccredited medical practitioners may apply to the PRU for individual patient authority to initiate patients with buprenorphine or buprenorphine-naloxone. Unaccredited prescribers may be authorised for up to 20 buprenorphine-naloxone patients.

To clarify, the total number of patients that an unaccredited prescriber may obtain authority to prescribe for, at any one time, is thirty (30) with a maximum of 10 of these patients being for methadone.

7.2 Individual patient authorities

Under Section 28 of the Poisons and Therapeutic Goods Act 1966, all prescribers must obtain an authority to prescribe methadone or buprenorphine from the Pharmaceutical Regulatory Unit (PRU) of NSW Health. This involves completion of the Application for Authority to Prescribe Methadone or Buprenorphine under the NSW Opioid Treatment Program, faxing the form to PRU and receiving confirmation of the authority from PRU prior to initiating treatment. The only exception is for inpatients treated in hospital settings where treatment can be provided without an authority for up to 14 days. An overview of steps involved in initiating a patient into OAT is provided in Table 13.

7.3 Treatment Exit / Transfer

Patients must be formally exited from treatment by the prescriber completing and submitting to PRU the Exit from Methadone and Buprenorphine Treatment form for each patient discharged from treatment or each patient transferred from the care of one prescriber to another.

If a patient has not changed prescriber but is to transfer between dosing sites, PRU is to be notified in writing of the change using the NSW OTP: Notification of Permanent change in Dosing Point. To avoid the potential for double dosing, the prescriber should notify the previous dosing site and have them cancel all prescriptions.

\textsuperscript{14} OTAC can be accessed through \url{www.otac.org.au/mod/resource/view.php?id=13}
### Table 13. Checklist of steps involved in initiating patient into OAT

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirm patient identity</td>
<td></td>
</tr>
<tr>
<td>Conduct assessment, establishing diagnosis of opioid dependence and any significant medical, psychiatric and social conditions</td>
<td></td>
</tr>
<tr>
<td>Negotiate treatment plan with the patient, including informed consent.</td>
<td></td>
</tr>
<tr>
<td>Identify medicine (methadone, buprenorphine-naloxone, buprenorphine) to be used, discuss any safety concerns during induction (risk of toxicity with methadone, precipitated withdrawal with buprenorphine), and process with patient (including doses, frequency of review)</td>
<td></td>
</tr>
<tr>
<td>Identify and communicate with dosing site (clinic or pharmacy). Patient to negotiate treatment conditions with dosing site (e.g. hours, dispensing fees)</td>
<td></td>
</tr>
<tr>
<td>Complete Authority Application for Methadone/Buprenorphine. Send fax to PRU and confirm authority is approved by ringing 02 9424 5921 during business hours</td>
<td></td>
</tr>
<tr>
<td>Complete a valid prescription, do not give to the patient, send this and patient identification information to dosing site</td>
<td></td>
</tr>
<tr>
<td>Schedule next appointment</td>
<td></td>
</tr>
</tbody>
</table>

### 7.4 Informed consent and confidentiality

Written informed consent should be obtained from the patient prior to commencing treatment. Patient consent should be obtained before communicating with other service providers, family or carers. The exception to this is where there are immediate concerns regarding the patient safety (e.g. overdose risk, doctor shopping) or the safety of others (child protection). Refer to *The Health Records and Information Privacy Act 2002 (NSW)* (the HRIP Act).
## Section 8

### Resources, supports and contacts

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Contact</th>
</tr>
</thead>
</table>
| NSW drug and alcohol services | Provide information and referral details | Accessed via Alcohol & Drug Information Service (ADIS):  
- 02 9361 8000 (Sydney)  
- 1800 422 599 (toll free)  
| Addiction medicine specialists | 24-hour telephone clinical support for health professionals regarding drug and alcohol treatment (Free service) | Accessed through Drug and Alcohol Specialist Advisory Service (DASAS)  
- 02 9361 8006 (Sydney)  
- 1800 023 687 (rural)  
| Local Health District (LHD) specialist drug and alcohol services | Provide intake services | Accessed via ADIS, LHD Drug Health / D&A / AOD Intake lines |
| Pharmaceutical Regulatory Unit (PRU), NSW Ministry of Health | PRU processes:  
- Applications for legal authority to prescribe for an individual patient  
- Notifications of patient exit from program  
- Notifications of transfer of dosing point | 02 9391 9944  
| Specialist Opioid Treatment Program Services | These Abbreviated Guidelines make reference to referring some patients to specialist services  
Referral to specialist services may be appropriate for patients whose treatment needs cannot be adequately met in primary care settings – either due to the complexity of the patient’s presentation, safety concerns, or due to limited community resources  
Patients may be referred for assessment and specialist opinion (consultation), for shared care services in which components of treatment are delivered jointly by primary care and specialist providers, or for the specialist service to take over the management of drug and alcohol issues for the patient | In NSW, specialist OTP services comprise of multidisciplinary teams of addiction medicine specialists, nursing and allied health professionals and are provided by each LHD  
Details regarding specialist OTP services in your area can be accessed through ADIS or your local LHD/Drug and Alcohol Intake Service  
There are also an increasing number of addiction medicine or addiction psychiatry specialists and GPs with special interest in drug and alcohol working in private and NGO settings  
ADIS can provide details of local services |
| The Opioid Treatment Line (OTL) | A telephone helpline that provides opioid pharmacotherapy information, referrals, advice and a forum for pharmacotherapy concerns. | Free call number: 1800 642 428. |