One of the many challenges in general practice is to supervise opioid use in patients who have chronic pain. In most individuals, this can be done with minimal issues and a low risk of complications; however, a small number of patients may become dependent on, or addicted to, these medications. For those who become addicted, opioid substitution treatment (OST) is a valuable option. OST is a program used by addiction specialists and authorised GPs to manage opioid addiction with controlled dosing of methadone, buprenorphine or buprenorphine with naloxone (the opioid antagonist naloxone discourages abuse of buprenorphine by injections).

The authors, one a GP with expertise in addiction medicine (IT), the other a suburban GP (VM), have coauthored this article with the purpose of showing how rewarding it can be for GPs to manage patients on an OST program.

**Case 1**

Mr BM, 38 years old, is a regular patient of your practice who was severely injured in a motorcycle accident nine months ago. He has worked as a storeman, is married with a supportive wife and has three young children and financial responsibilities. He had never used anything stronger than paracetamol for pain in the past. He has no personal history of illicit substance use and there is no family history of opioid or other substance abuse. He is a nonsmoker and a social drinker only. There is also no history of mental health problems.
After the accident, Mr BM had many months of treatment in hospital and then was discharged on a high dose of oxycodone (oxycodone sustained release 40 mg twice daily and oxycodone 5 mg as needed, up to a maximum of 15 mg per day) to manage persistent post-traumatic and postoperative pain. He had returned to work but had been struggling with pain, and his opioid dose had gradually been increased under another GP’s medical supervision to oxycodone sustained release 80 mg twice daily and oxycodone 10 mg as needed, up to a maximum of 40 mg per day.

After several months, it became apparent that Mr BM had features of addiction (Box 1). He was using extra (nonprescribed) doses of short-acting opioid every time he felt pain (an additional 40 mg oxycodone per day) and would take another oxycodone sustained release 40 mg tablet (a leftover tablet) some days when the first tablet did not help, none of which he reported to his other GP. He was increasingly focused on his pain and was starting to present early for prescriptions. He was not coping at home or work. His wife had noticed these changes and called your practice to express her concerns.

At Mr BM’s next attendance for his prescriptions, he admitted that he was struggling and relying on additional doses of medication to cope. After discussion with you, he acknowledged that he had an opioid dependence. On further questioning, he said he did not feel actually depressed, just flat due to pain. You contacted a pain specialist and an addiction specialist for advice, and they both agreed to see Mr BM urgently. As well as deciding on a treatment agreement, their advice was to refer Mr BM to a local clinical psychologist and physiotherapist for treatment recommended by the pain specialist.

After seeing the addiction specialist, Mr BM’s oxycodone was ceased and he was commenced on methadone tablets twice daily (this is prescribed for pain relief; liquid methadone is indicated daily for addiction only).

Mr BM returned to your care with clear recommendations, including a strategy to wean the methadone, and with the addiction specialist continuing to prescribe it. You contacted your local pharmacist and he became involved in Mr BM’s care plan. You maintained a shared-care arrangement, consisting of the addiction specialist’s support on the phone and his methadone prescriptions and your bimonthly reviews of Mr BM.

As the methadone dosage for pain was being decreased, Mr BM told you he was fighting the need to take oxycodone again; he was concerned that he would not cope if the methadone dose were reduced further. You discussed this with the addiction specialist and he transferred Mr BM to a daily liquid dose of methadone, with a plan to continue this for several months and then transfer Mr BM to buprenorphine–naloxone sublingual film daily, with the dose to be weaned down over another few months and then ceased. It should be emphasised that the TGA indication (and PBS listing) for buprenorphine–naloxone, as for methadone liquid, is for the treatment of opioid dependence (i.e. as an OST), not for analgesia. The buprenorphine component, like methadone, reduces withdrawal symptoms and the naloxone component deters misuse by injection (naloxone has little effect sublingually or orally because it is poorly absorbed via these routes but it will cause opioid withdrawal if injected).

After several months, Mr BM felt he could cope without oxycodone and the daily liquid methadone was then changed to buprenorphine–naloxone sublingual film, 24 mg/6 mg daily. Mr BM was relieved to have ceased the methadone, as he felt this was stigmatising. As part of his treatment agreement, Mr BM started with daily dosing of buprenorphine–naloxone, and over time he was able to increase the time between obtaining his medication doses. Several months later, Mr BM ceased all medication. He continued to work during this entire time. Psychological and physical therapy and

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**1. OPIOID TOLERANCE, PHYSICAL DEPENDENCE, ADDICTION AND PSEUDO-ADDICTION**

**Tolerance**

Tolerance is a state of neurophysiological adaptation in which exposure to a drug induces changes that result in a reduction of the drug’s effects over time so that the dose needs to be increased to obtain the same benefit. Patients with opioid tolerance have no clinical features of addiction. These patients are recognised as the ones who require a gradual increase in drug dosage over months or years. Opioid tolerance is neurophysiologically related to physical opioid dependence.

**Physical dependence**

Physical dependence refers to neurophysiological changes and withdrawal symptoms identified by cessation of the opioid or giving an opioid antagonist. It is reversed by re-administering an opioid medication. A patient with physical opioid dependence and adequate analgesia will be generally compliant with the treatment, often stable for months or years, and there are no features of addiction.

**Addiction**

Addiction (also often termed ‘dependence’) is recognised as compulsive use of an opioid that interferes with other activities and function, including caring for self, work or family, impaired control of use, cravings and continued use despite known harm. Addiction involves both physical and psychological dependence.

**Pseudo-addiction**

Pseudo-addiction is physical dependence with psychological and behavioural features of misuse or addiction that ends when an appropriate analgesic opioid dose is provided. It is seen in patients without tolerance or addiction and in those using subtherapeutic doses of opioid, and in patients with changed opioid tolerance. Aberrant or addiction behaviours stop once an adequate dose is provided, and usually only a small increment is required. If the doses keep increasing, consider addiction. If in doubt about the diagnosis, consider seeking a pain or addiction specialist’s advice.
the GP’s counselling and advice assisted him to manage his persistent pain without opioid medications.

Case 2
Mr GW is a 65-year-old man with a past history of cannabis, heroin and prescription opioid abuse. He was born in a major city and raised in an impoverished and difficult home environment. He fell into opioid substance abuse initially after an injury, and this continued due to the influence of a girlfriend who was also addicted. He has been on methadone OST for many years and describes himself as a ‘burnt-out drug user’. He has a regular addiction specialist, whom he sees every six months.

Mr GW has recently moved into your small rural town in the hope of a quiet life. He has not abused any illicit substance in years. He has no mental illness and no major health issues apart from being a cigarette smoker and having stable inactive hepatitis C. He has a supportive friend who lives locally and who has no significant health problems or addiction history.

At his first appointment with you, Mr GW asked if he could become his regular GP. A few appointments later, he asked if he could be weaned off the methadone OST as he now felt well cared for and supported by his GP (you) and his addiction specialist. His specialist agreed and in a shared-care arrangement between the specialist and you the GP, Mr GW was gradually weaned off the methadone therapy, rotated to buprenorphine–naloxone and exited the OST program several months later.

Discussion
Prescription opioid drug addiction is an escalating problem. The patient who has chronic pain is at higher risk of addiction, and GPs and specialists must find the balance between good pain management and minimising opioid dependence.

Patients at risk of developing opioid addiction may have a neurobiological predisposition. Some of these patients are identified by past and current behaviour, validated tools, regular clinical review and assessment, monitoring of dispensing of prescriptions and speaking with the local state or territory pharmaceutical services unit (Boxes 2 and 3).

Although some patients’ cases are more complex and these patients are best managed under the care of an addiction specialist, whom he sees every six months.

3. RESOURCES FOR PRESCRIBING OPIOIDS

  - general information and resources for the public and health practitioners on the management of chronic pain
- Opioid treatment accreditation training courses – vary between states and territories, e.g. NSW Health (www.otac.org.au)
- Opioid treatment programs – vary between states and territories, e.g. NSW Opioid Treatment Program – Health Practitioners (www.health.nsw.gov.au/pharmaceutical/doctors/Pages/otp-medical-practitioners.aspx)
- National Prescription Shopping Program (www.humanservices.gov.au/health-professionals/services/prescription-shopping-information-service/)
  - the Prescription Shopping Information Service (phone 1800 631 181) is a 24-hour, seven days a week telephone service to help prescribers assess if a particular patient meets the criteria of the Prescription Shopping Program; if the criteria are met then the patient’s prescribed medications can be checked
- State and territory pharmaceutical services units*
  - information provided includes whether a patient is currently receiving opioid substitution treatment or has received it in the past
  - any patient treated with long-term opiate therapy must be registered with the local state or territory pharmaceutical services unit and the doctor must apply for authorisation to prescribe these medications – see the legislation requirements for each state or territory, e.g. NSW Health Form 1: Application for authority to prescribe a drug of addiction, available at www.health.nsw.gov.au/pharmaceutical/Documents/form1.pdf
- Tools for assessing patients with pain when considering opioid therapy
  - Opioid Risk Tool (ORT) – to predict which individuals may develop aberrant drug-related behaviours, e.g. www.aci.health.nsw.gov.au/chronic-pain/health-professionals/assessment

* For contact details of the various pharmaceutical units see Table 1 in the article by Holliday and Jammal titled ‘The analgesia tango’ in this supplement.
specialist or a GP who has a special interest in addiction medicine, others can be managed in the community by their GP with support from other health professionals. Whether the problems are addiction, chronic pain or both pain and addiction, these patients also need a GP to provide routine health care.

The cases
In Case 1, Mr BM has a strong desire to reduce and cease opioid medication, as he is aware of the impact the medication is having on his quality of life, family and work. He can be managed in general practice, supported by the local pharmacy. His GP is able to contact both an addiction specialist and a pain specialist for advice. He has no significant mental health issues or other medical problems interfering with his care. There is a clear strategy for the future and Mr BM engages in non-pharmacological strategies to manage his pain, reducing his reliance on medication and assisting in the cessation of the opioid medication.

In Case 2, Mr GW has insight into his situation, recognises the error of his past use and accepts that he has opioid dependence. He has been compliant with treatment and medical advice and has some social support and a stable lifestyle. He, too, has no significant health problems and requires a GP to provide routine health care. He may have assumed that he needed to be on OST for life, but good care and support by his GP provides him with an opportunity to wean off OST.

GP-provided care
Examples of care that GPs can provide to opioid-dependent patients as well as monitoring their OST are:

- providing routine health checks
- treating health issues that may arise
- arranging supportive counselling (either by the GP or by a psychologist)
- co-ordinating specialist care and communication
- seeing patients regularly to assess pain management and medication use
- screening and early intervention if patients are using nonprescribed medications
- acting as a ‘sounding board’ for patients considering alternative therapy or complementary medicines
- keeping an accurate record of medications and health problems
- being a health professional the patient can trust and who provides support if he or she is going through a difficult time.

The management of these patients depends on you, the GP, as the specialists are unable to see these patients frequently. These patients require regular review and general health care. Stable patients with addiction issues or patients taking medications for pain who are opioid dependent can, and ideally should, be managed in routine general practice. Most of the care is the same as that which would be provided to other patients. The only difference is the need to monitor their OST or opioid use. This involves the occasional need for a longer consultation, with you, the GP, having the confidence to help these particular patients and the skill to establish a rapport with them, so that they feel comfortable with you as their doctor. It may encompass a good understanding of psychological medicine and counseling. It is useful to have affiliations with allied health professionals such as psychologists or physiotherapists with whom you could share the load. If managing these patients seems daunting, several educational resources can be of assistance (Box 4).7

Helping opioid-dependent patients also involves familiarity with the various state and territory regulations regarding prescribing opioids to patients with non-cancer pain and the management of patients with addiction. OST training and official recognition as an OST prescriber is required for GPs who would like to care for individuals on methadone (Box 3). Depending on legislation, other doctors may choose to care for patients on OST in a shared care arrangement with an addiction specialist. Some states and territories allow a GP this arrangement for up to five patients who are taking buprenorphine with naloxone.

References