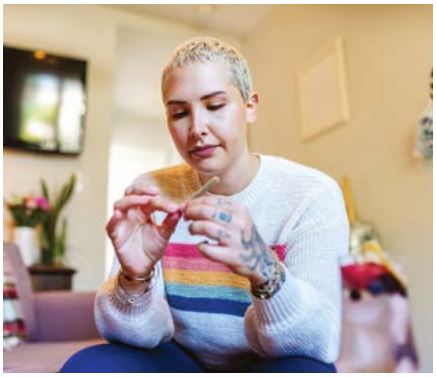
General practitioner-led alcohol and other drugs withdrawal

Supporting patient choice, safety and success



CPD

Shani Macaulay, Paul Grinzi, Simon Slota

Background
Alcohol or other drug (AOD) withdrawal is a common reason for patients to seek treatment. Ambulatory, or 'home-based', AOD withdrawal for patients who are low risk is a useful intervention for general practitioners (GPs) to help empower their patients to improve their health and make meaningful change to their AOD use.

Objective
This article explores the themes of patient choice, safety and optimising success in GP-led withdrawal. The four-step framework of 'who', 'prepare', 'withdrawal' and 'follow-up' outlines how to best support patients in the general practice setting to undertake a withdrawal.

Discussion
There are many benefits to a GP-led, home-based AOD withdrawal. The strategies to facilitate choice and safety and to optimise withdrawal success described in the article include careful patient selection, preparing the patient using domains of whole-person care, clarifying the patient's goals and stage of change, support during withdrawal and fostering long-term treatment in general practice.

ALCOHOL OR OTHER DRUG (AOD) withdrawal is a common reason for patients to present for treatment. The Australian Institute of Health and Welfare found that during 2020–21, 10% of AOD treatment episodes delivered by specialist AOD services (over 22,000) were for withdrawal management.[1] Approximately 50% of these were for alcohol, 16% were for amphetamines and 13% were for cannabis.[1] However, with regard to general AOD consumption in the Australian community, we know that alcohol is the most common substance consumed (77%), followed by cannabis (11.6%) and methamphetamine (1.3%).[2] We also know that approximately 9 in 10 patients saw their general practitioner (GP) for any form of healthcare in the previous 12 months and that medical specialist access occurs at a rate of less than half this number.[3] GPs continue to be the most accessed health professionals for general healthcare in Australia.

GPs are the bedrock of Australian healthcare, frequently treating patients who have AOD-related issues, including those with a substance use disorder (SUD), whether it be their primary complaint or comorbidity.[4,5] For those people who experience withdrawal symptoms if they try to reduce or cease their AOD use, a GP-led, home-based withdrawal program can be an effective option for patients in the primary care setting.[6,7] Current guidelines for AOD withdrawal speak to patients having various goals of care that include, but are not limited to, abstinence, stabilisation and respite from AOD use.[6,7] The guidelines emphasise the importance of patient choice, person-centred care, autonomy, safety and the importance of planning for success.[6] GP-led, home-based alcohol withdrawal is covered comprehensively elsewhere.[8,9] This article provides a framework for GP-led, home-based AOD withdrawal, using cannabis as a case study, to example a whole-person care approach and a four-step process to guide management.

CASE STUDY: KIM

Kim is a woman aged 18 years who presents to your clinic with her mother. After a period of rapport building, Kim admits to smoking cannabis (joints and bongs), mixed with tobacco, daily with friends. Kim can't quantify the volume: 'I dunno maybe a foil or two, 1–2 grams, a day?' She describes having low energy and poor motivation. Kim's family has a history of family violence and paternal incarceration. Kim wants to reduce her cannabis use but is not able to due to the insomnia, anxiety and nausea that she experiences every time she tries to taper her use. Kim wants to know what other options she has available to reduce and stop smoking (cannabis and tobacco).

Why should a patient have a planned withdrawal?

When considering the role of withdrawal and its place in treatment, the overarching guiding principle should be patient safety.[6,7] A home-based withdrawal should only proceed or continue if it is safe to do so. Goals of care should be individualised and person centred (helping set realistic expectations for the patient, family and doctor); they may include abstinence, a period of abstinence, reduced use, controlled use or continued but safer use (see Box 1).[6,7,10,11] Stabilising a person's substance use through withdrawal can offer respite from the biopsychosocial sequelae of AOD use.[12]

Home-based withdrawal

GP-led, home-based withdrawal is an option for many patients and can provide many benefits.[8,6,7] The global pandemic and emerging strength of telehealth has increased the accessibility of treatment, leading to innovative care provision.[13] Current guidelines recommend having a choice of service as one of the first priorities when considering the setting for withdrawal (self-determination is a key part of sustained behavioural change).[6,7,14,15] There can be a level of increased discretion and privacy when patients access their GP for care.[8,12] Patients can stay in their community. Removing geography as a barrier to care increases accessibility to treatment. Staying in community maintains connection to land and family for those people living in rural and remote areas, and especially for Aboriginal and Torres Strait Islander peoples and culturally and linguistically diverse groups.[10] A GP-led, home-based withdrawal maintains family and cultural support, which are known protective factors that facilitate a strengths-based approach to AOD treatment.[12] A GP-led, home-based withdrawal may also increase psychological safety for patients, meeting the principles of trauma-informed care: safety, trust, choice, collaboration, empowerment and respect for diversity.[16]

Box 1. Goals of care vary between patients[6,7,12]

A planned, medically supported withdrawal can help:

- avoid serious sequelae, such as life-threatening seizures or serious morbidity related to either the substance use disorder (SUD) itself or unplanned withdrawal symptoms
- avoid a decline in chronic comorbidities
- allow a period of abstinence during which to engage in goal setting and treatment of the SUD
- improve the success of withdrawal and increase the chances of maintaining abstinence
- allow for reduced use in cases where a patient is unable to taper due to intolerable withdrawal symptoms
- reduce unnecessary discomfort or suffering of withdrawal symptoms
- develop coping strategies to manage cravings and increase the success of the withdrawal
- avoid the 'kindling' phenomenon, whereby withdrawal symptoms become more severe with each withdrawal attempt
- engage in a structured aftercare program and pharmacotherapy when appropriate

Assessing withdrawal severity

Withdrawal symptoms arise when a person's brain neuroadapts to a drug; this affects the hypothalamic–pituitary–adrenal axis and amygdala.[17] Cessation of the drug creates acute brain stress in these systems and the dropping of key feel-good hormones, such as dopamine, serotonin and oxytocin.[17] Assessing predicted withdrawal severity is essential when planning a GP-led withdrawal, as is careful monitoring and documentation for current and future care planning. Withdrawal can result in central nervous system hyperactivity, which can result in seizures, severe symptoms and, in rare cases, death.[6,7,17]

More severe withdrawal syndromes are associated with higher-volume substance use, chronicity of substance use, intravenous use, polysubstance use, complicated comorbid illness and severe psychiatric illness, such as suicidal ideation and psychosis.[6,7] A patient with a predicted severe withdrawal, serious comorbidities or unstable home life should be referred on for inpatient admission to access more intense medical support.[6–8] A patient with predicted mild to moderate withdrawal, a supportive home life and no serious comorbidities has a low risk of these severe symptoms and may be suitable for a home-based, GP-led withdrawal (see Box 2).[6,7,8]

Planning for a successful withdrawal

Planning for a successful withdrawal involves four steps, as detailed below.[6]

- 'Who': careful patient selection
- 'Prepare': optimising the dimensions of whole-person care and preparing for withdrawal
- 'Withdrawal': providing supportive care during the withdrawal attempt
- 'Follow-up': providing a structured aftercare program

How to organise a GP-led, home-based withdrawal generally, and for Kim specifically, is explored in detail below.

'Who'

GPs should ensure that the patient is in the 'preparation' or 'action' stage of change and that the patient is ready, willing and able to successfully undergo a withdrawal program.[18] If the patient is not in the appropriate stage of change or not 'ready, willing and able', then this is an opportunity for the GP to review and determine the patient's needs as per the domains of whole-person care.[19,20]

Box 2. Does the patient meet the following low-risk criteria?[6,7,8,42]

- Support person available
- Safe, stable housing (including assessment of domestic violence risk)
- No past history of withdrawal seizures or delirium
- No polydrug use
- No suicidality
- No serious physical or psychiatric comorbidities
- Accessible for medical review
- Normal renal function and not more than mild liver function derangement (<3 × upper limit of normal)[34]
- Access to 24-hour telephone crisis support

The first step is to predict whether the patient is likely to have a mild, moderate or severe withdrawal severity by assessing the patient's level of consumption, as well as past experience of withdrawal severity, and using screening tools to determine whether a person has risky or dependent use.[6,7] A simple question, such as asking what an average day looks like, or what happens if a person does not use AOD helps gauge whether a person has a dependent daily use pattern and whether they have withdrawal symptoms. Ensure the patient meets the low-risk criteria for home-based withdrawal (Box 2).

In Kim's scenario we could use the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)[21] and the Severity of Dependence Scale (SDS)[21] to assess her cannabis use, as well as the Kessler Psychological Distress Scale (K10)[22] to assess her mental health.

Severe withdrawal, as well as withdrawal in some population groups, should be managed by an AOD specialist. Multiple withdrawal attempts should be avoided and can result in a phenomenon called 'kindling', whereby neuronal sensitivity appears to increase and the severity of withdrawal symptoms such as seizures, especially for alcohol, increases with each withdrawal attempt (Box 1).[6,23] These patients should be referred to a specialist service because of their increased risk of complications.[4]

Pregnant or breastfeeding women should be reviewed and managed by specialist services, as should young people under the age of 18 years.[6,7] Withdrawal symptoms can feel the same as trauma symptoms, 'triggering' a patient, activating their nervous system and risking real harm.[24] Education about this and a referral to a psychologist to develop coping strategies and a management plan are essential.[24] Consider referral to a specialist service for people who have experienced trauma, those with severe psychiatric illness, older people (due to an increased risk of comorbidity) and those with specific cultural needs.[6,24] Each state has an AOD clinical advisory service number; we recommend discussing the case with your local service if there are any concerns.[25] Substance-specific withdrawal considerations are provided in Table 3. Note, Table 3 is not exhaustive; a range of resources has been provided in this article for specific advice.

CASE CONTINUED

You determine that Kim meets the 'low-risk criteria'; she has a mild SUD with mild anxiety. You ask Kim to make an appointment for a chronic disease care plan for her SUD to build a problem list using the whole-person care domains. This helps with the preparation to meet Kim's health needs, assess the appropriateness of withdrawal and to determine whether she is 'ready, willing and able'.

'Prepare'

Describe to the patient the expected timeline of withdrawal symptoms and give them an appropriate handout.[26] Monitoring the signs and symptoms of withdrawal severity requires close supervision, in person or when appropriate via telehealth. Schedule your reviews daily for the first three days, then every second day if the patient is asymptomatic (determined between GP and patient). Assess withdrawal severity using substance-specific withdrawal scales.[21] In Kim's case, use the Cannabis Withdrawal Scale.[21] The patient and support person should be given clear instructions what to do after hours and provided with a 24/7 telephone advice line and education on the nearest emergency assistance. How to

Table 1. Prepare, using whole-person care domains[6,7,8,19,35,37,38]

Biomedical	• Educate patients about withdrawal syndromes, what to expect and when to escalate care • Perform a full blood count and kidney function and electrolytes, liver function, calcium, magnesium, phosphate, vitamin B_{12}, folate, iron and glucose tests • Establish an agreement with the patient to not drink or drive while taking benzodiazepines (patient contracts can help) • Discuss with the pharmacist the medication regimen and arrange a staged supply of diazepam • Provide first aid information for seizures (safety-netting even for these low-risk patients)
Body–mind	• Discuss cravings management: delay, distract, decide, positive self-talk, relaxation and imagery • Provide education about basic psychological techniques around mindfulness, breathing techniques and grounding
Lifestyle	• Encourage the patient to eat regular small meals; a high-protein, high-energy diet; and regular fluid intake • Consider a multivitamin and thiamine supplementation if the patient has been eating poorly • Optimise rest and sleep with sleep hygiene and relaxation practices (sleep may be directly affected during some substance withdrawal syndromes) • Encourage physical activity and time in nature to help with sleep and mental and physical wellbeing
Connection (relationships)	• Involve the patient's support person, when appropriate and with the patient's consent; positive family support is a protective factor for AOD treatment • Review and modify access to people considered to be less helpful
Activities and responsibilities	• Ensure any obligations to children or other dependents, as well as work, financial or court requirements, are met; this may mean delaying withdrawal to a specific date or providing a medical certificate for sick leave

AOD, alcohol or other drug.

prepare using whole-person care domains is summarised in Table 1.[6,7]

CASE CONTINUED

The next month Kim's mental health has deteriorated; she now has severe anxiety and moderate depression. You commence treatment of her mental health disorder and engage her in motivational interviewing for her SUD (parallel treatment).[24] You are aware that young people, especially those aged under 16 years and who smoke cannabis, may have increased rates of psychiatric illness and family dysfunction.[6,27] You discuss with Kim and her mother that Kim is not a good candidate for a home-based withdrawal (less safe and reduced likelihood of success), and both Kim and her mother agree.

You raise the option of an inpatient unit admission (choice) to a youth-focused service, avoiding adult services.[6,27] Kim and her mother decline an inpatient admission; they live rurally, don't want to travel and would rather be managed in the GP setting. They decline counselling at the public child and adolescent mental health service for similar reasons. You engage Kim in simple psychological techniques to manage anxiety, develop a GP mental health plan and, on subsequent review, prescribe fluoxetine for Kim's anxiety and depression.

Eight months later Kim's anxiety and depression have been well managed for several months and she would like to talk to you about withdrawing from cannabis; her mother is supportive. Kim is in the 'action' stage of change, having made steps to taper use and feels 'ready, willing and able'.[18,20] Together you engage in goal setting and make a plan for withdrawal.

'Withdrawal'

We recommend starting a home-based withdrawal at the beginning of your working week; in this way you can best monitor the patient and respond to their needs as they arise. Communicate with your nursing team about the planned withdrawal. Explain that if the patient presents with withdrawal symptoms they should have treatment expedited in the clinic treatment room. Using a specific substance's withdrawal scale can help identify severe withdrawal early. A practice-wide policy or system and an AOD withdrawal file in the clinic treatment room can help streamline this process.[28]

Encourage regular fluid intake and small light meals, a multivitamin and thiamine throughout.[6,7] Unfortunately, there is no one proven medication that can ameliorate the range of withdrawal symptoms associated with cannabis, methamphetamine or benzodiazepines. However, medications can be used for supportive treatment as symptoms arise, along with supportive GP care (Table 2). It is important to reassess the patient at every review and to consider whether they are still low-risk and whether home-based withdrawal is still safe to continue. Concerns around difficult-to-control withdrawal symptoms or challenging behaviours should be discussed with your state-based clinical advisory service or the national AOD hotline.[25,29] In the scenario of escalating withdrawal symptoms despite adequate treatment, or concerns around life-threatening symptoms such as psychosis or seizure activity, the patient should be referred urgently to their local emergency department.[6,7]

Table 2. Symptomatic treatment for alcohol or other drug withdrawal[6,7,26]

Nausea and vomiting	Anti-emetics: metoclopramide, ondansetron or prochlorperazine
Diarrhoea	Loperamide
Abdominal cramps	Hyoscine butylbromide
Headaches, muscle aches	Paracetamol or ibuprofen (depending on liver function and gastrointestinal disease), magnesium
Insomnia or agitation	Promethazine for insomnia or a short course of temazepam or diazepam (eg diazepam 5 mg bd or where benzodiazepine polydrug use exists, trial low-dose olanzapine 2.5 mg, for less than one week duration[A])
Psychosis	Low-dose olanzapine, consult a psychiatrist
Emergency support	Call 000 for life-threatening emergencies For urgent matters, patients should be given the practice's telephone number and a local mental health service's 24/7 emergency telephone number. Other 24/7 emergency numbers include:[29] • National AOD Hotline: 1800 250 015 (available to patients, family and GPs) • Family Drug Support: 1300 368 186 • Kids Helpline (for those aged 5–25 years): 1800 55 1800 • Lifeline: 13 11 14

[A]Note see Table 3 for alcohol and benzodiazepine withdrawal.

AOD, alcohol or other drug; GPs, general practitioners.

Benzodiazepine use for withdrawal

Benzodiazepines are a useful short-term treatment for alcohol and other substances. Importantly, benzodiazepines should be prescribed for the week of withdrawal only, with quantities being restricted to that week; long-term use should be avoided because:[6,8]

- significant tolerance can occur in as little as two weeks[6]
- data on long-term benzodiazepine use is increasingly damning, with chronic use associated with pervasive cognitive impairment that persists despite withdrawal[30]
- benzodiazepines in combination with alcohol and other drugs are dangerous

and are a lead pharmaceutical responsible for accidental polysubstance overdose and death.[31]

Clear instructions around why benzodiazepines are indicated for withdrawal (and no longer) and how to take them should be given. A responsible support person can assist with this at home to ensure adequate dosing and escalation of care if needed. Pharmacy-staged dosing (eg daily dosing) can help manage medication concerns around benzodiazepines (or any substance of concern) where there may be a risk of sedation, diversion, accidental child ingestion, polydrug use and dependence.[32] A patient contract can help better clarify this between the doctor, patient and support person.[32]

'Follow-up'

A structured aftercare program, for at least the following one year, is essential.[6,7] SUD is a chronic disease that is relapsing and remitting.[33] Rates of relapse to substance use in the first year range between 30% and 70%.[33] The risk of overdose from AOD due to reduced tolerance after a period of abstinence should also be discussed (Table 3). Reasons for relapse include stress, low mood, anxiety, cravings, being bored and a lack of positive reinforcers, such as employment, loved ones and responsibilities that do not involve AOD use.[34] Thus, a whole-person care approach (Table 1) that involves motivational interviewing is paramount to helping patients develop coping strategies to manage lapse or relapse.[20,35] Full 'remission' may not be achievable and recovery may look more like a person transcending the symptoms of their SUD 'to lead a meaningful and fulfilling life, including making a valuable contribution to family, community and society'.[34]

Chronic disease care plans and mental healthcare plans increase patient support and help to pace the timing of reviews.[36] Consider long-term therapies, such as acamprosate or naltrexone for alcohol use disorder, or buprenorphine or methadone for opioid use disorder.[6,7] Other domains of whole-person care, such as connection, activities and lifestyle factors that do not include AOD use, are protective for recovery.[20,37,38] There is good evidence that 12-step programs, such as Alcoholics Anonymous and Narcotics Anonymous, maintain patients in long-term abstinence compared with cognitive behavioural therapy.[39] SMART (Self-Management and Recovery Training) recovery is another option that helps address social connectedness and long-term treatment engagement.[40]

CASE CONTINUED

Kim underwent a successful withdrawal and enrolled in TAFE. Eight years later you see Kim again in the clinic. She is now 26 years old and pregnant; she is not using cannabis, but is smoking cigarettes. You commence nicotine replacement therapy.[41] Kim manages to quit smoking,

Table 3. Withdrawal-related considerations specific to substances[6,7,43,44]

Alcohol	For alcohol withdrawal, the primary treatment is benzodiazepines because they act on the same receptors as alcohol, reducing the sympathetic hyperactivity of the central nervous system (withdrawal symptoms), preventing severe sequelae such as withdrawal seizures and delirium tremens. Accurate prediction of withdrawal severity is important to determine the benzodiazepine dosing schedule, which may look like 5–10 mg qid initially; higher doses may be needed for more severe withdrawal[A] as per the alcohol treatment guidelines.[43] Patients with acute liver failure or cirrhosis are not appropriate for diazepam and a home-based withdrawal.
Benzodiazepines	In the case of benzodiazepine withdrawal, a slow taper is recommended rather than an acute withdrawal (sudden cessation) due to the risk of seizures and insomnia. Work on anxiety and insomnia with evidence-based treatments prior to and during tapering (eg CBT, ACT, SSRIs). Converting to diazepam and stabilising the dose for one to two weeks is a useful approach; reduce by 2.5 mg/week, as tolerated. A compromise around slower tapering and patient contract may help negotiations. Inpatient withdrawal is recommended if the patient is consuming >50 mg diazepam equivalent per day or has a history of seizures.[A] For more details, see the Benzodiazepine Toolkit.[44]
Opioids	For opioid withdrawal in the setting of an opioid use disorder, the strongest evidence is not for a short withdrawal, but rather for opioid substitution therapy, such as buprenorphine or methadone, for at least 12 months. Where short withdrawals are indicated, clonidine[A] can be used to reduce the 'flu-like illness'. Reducing doses of buprenorphine or methadone can be used in inpatient withdrawal settings. The risk of overdose after a period of abstinence should be discussed; if resuming use, the patient should be advised to use the smallest volumes possible and prescribed naloxone (see the National Guidelines for Medication-Assisted Treatment of Opioid Dependence[45]).
Cannabis	A more severe withdrawal is associated with combined tobacco use, a history of aggression and chronicity of use. Nicotine replacement therapy should be used concurrently. For some people, withdrawal can 'unmask' bipolar affective disorder, other mood disorders and psychosis[A] (see Cannabis Information and Support[46]).
Amphetamines	Withdrawal symptoms are not dangerous and require supportive care. Protracted withdrawal can occur over one to two months. For protracted insomnia, avoid ongoing hypnotic medications; use sleep hygiene practices and supportive care. Psychotic symptoms are common. Mild symptoms can be treated with an antipsychotic such as olanzapine; however, we suggest consulting a psychiatrist for further advice[A] (see the Methamphetamine Treatment Guidelines[47]).

[A]In these scenarios, we would advise that these cases are discussed with an alcohol or other drug (AOD) specialist service.

ACT, acceptance and commitment therapy; CBT, cognitive behavioural therapy; SSRIs, selective serotonin reuptake inhibitors.

engages in a parenting counselling program and has a healthy pregnancy and baby.[42] You are aware that the rate of relapse to previous AOD use in the postpartum is high. Kim's current priority is providing the best care for her baby. She is well engaged in primary care, happy to discuss relapse prevention planning and knows your door is 'always open'.[20]

Conclusion

Empowering a patient to engage in a planned, GP-led withdrawal when they are 'ready, willing and able' is a useful tool for managing SUDs. Clarifying goals of care and having a choice of withdrawal settings increases patient autonomy. Assessing withdrawal severity risk and distinguishing who is suitable for a low-risk, home-based, GP-led withdrawal is essential for patient safety. The use of a framework for withdrawal that is informed by the domains of whole-person care can help GPs engage patients in AOD treatment. These strategies can be used to offer choice, provide safety and optimise the success of GP-led, home-based withdrawal.

Key points

- GP-led, home-based withdrawal is an option for many low-risk patients who use AOD.
- Withdrawal is a tool that leads to different outcomes (eg respite, stabilisation or abstinence).
- People who have an SUD should be offered the choice of setting and circumstances for withdrawal.
- Patient safety should be considered at each review as the overarching principle of care.
- Person-centred care accounts for a person's stage of change and optimises success.

Authors

Shani Macaulay MBBS, FRACGP, DCH, RACGP Medical Educator and GP in clinical practice, Albany, WA

Paul Grinzi FRACGP, MMed, MBBS, BMedSci, DipDerm, RACGP Medical Educator and GP in clinical practice, Melbourne, Vic

Simon Slota-Kan MBBS, MPH, FRACGP, FAFPHM, Medical Educator and GP in clinical practice, Newman, WA

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Correspondence to:
shani.macaulay@pioneerhealth.com.au

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correspondence **ajgp@racgp.org.au**