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New Australian guidelines for the treatment of alcohol problems: an overview of recommendations

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Chapter 1 Guidelines for the treatment of alcohol problems: an introduction

Benjamin C Riordan^{1,2,3,*}, Daniel T Winter^{1,2,*}, Liz Barrett^{4,*}, Alison Ritter⁴, Kari Lancaster⁵, Kate Seear⁶, Kerryn Butler^{1,7}, Paul S Haber^{1,2,7}

lcohol offers a mixed legacy to our society, having long been used in a broad range of social, cultural and religious contexts; some countries and cultures routinely permit alcohol use while others frown upon or prohibit consumption. In 2017, per capita alcohol consumption in Australia was at its lowest within the past 50 years, at 9.5 L of pure alcohol consumed annually, yet it is the sixth highest risk factor contributing to the burden of disease in Australia. Notably, consumption of alcohol is higher among key demographic groups, including males, 2,3 younger people, 4 sexually diverse and gender diverse individuals, 5 some culturally and linguistically diverse individuals, 4 and people from regional areas.

Importantly, although Australia is seeing a general reduction in alcohol consumption (particularly among young people), alcohol still causes considerable health and societal harm and there does not appear to have been a corresponding decrease in alcohol-related harms. Key alcohol-related harms in Australia include:

- Alcohol-related deaths: these have risen, with 5552 deaths attributed to alcohol in 2017.⁴
- The link between alcohol and disease: alcohol consumption is linked to over 200 diseases, including alcohol-related injuries, cancers, cardiovascular diseases, and liver disease.⁶ This contributes to 4.6% of Australia's overall burden of disease.⁴
- Alcohol-related hospitalisations: in 2012–13, there were about 150 000 alcohol-related hospitalisations. Despite declines in consumption, alcohol attributable emergency department presentations, hospitalisations and ambulance attendances have remained stable or increased.^{7,8}
- The economic impact of alcohol problems: alcohol problems negatively impact the economy. Conservative estimates in 2010 suggest a \$14.4 billion cost to the economy, more than double Australia's alcohol-related tax revenue.⁹

It is also important to consider the impact of stigma and associated harms that are linked to alcohol use. Stigma is a label or stereotype that devalues, discredits and discriminates against individuals. People who experience alcohol-related problems often experience stigma, as these are frequently viewed as personal moral failings that are undeserving of sympathy. 11,12

Stigma is, unfortunately, common across health care settings for people experiencing problems with alcohol and it is a significant barrier to accessing health and other services. ^{13,14} Research has found examples of clinicians denying appropriate care to patients experiencing problems (eg, regarding them as less deserving of liver transplants). ^{15,16} Patients have reported being offered

advice based on clinicians' own opinions rather than evidence, and being talked down to, scolded and blamed for the problems they are experiencing with alcohol; such experiences deter future and further help-seeking. ¹⁶

It is critical to reduce stigma where possible. Although stigma should be addressed at the structural and organisational level (as individual clinicians can struggle to make behavioural changes where this is not supported by the broader workplace)^{16,17}, there are a number of steps that individual clinicians can take:

- use person-centred practice that treats patients with respect and compassion and includes the patient in decision making about their treatment;
- use language consistent with guides produced by peer support organisations, to prevent the use of any potential prejudicial or stigmatising language when communicating with patients and the general community; and
- take part in anti-stigma training, especially training that is peer-led or has had substantial peer input into its development.

Here, we introduce the Guidelines for the Treatment of Alcohol Problems, an evidence-based guideline document which aims to provide information for clinicians on available treatments for people with alcohol problems. Having been periodically updated over the past 25 years, the present version of the guidelines, released in April 2021, was commissioned by the Commonwealth of Australia to remain current and integrated with the updated National Health and Medical Research Council Australian Guidelines to Reduce Health Risks from Drinking Alcohol (Box 1). ¹⁹

The aim of this supplement is to provide a succinct review and outline the key recommendations of the current Guidelines for the Treatment of Alcohol Problems. It should be noted that this supplement does not focus on prevention. We acknowledge that a comprehensive public health approach to reducing alcohol-related health and social harms includes community level approaches, and these are comprehensively covered in the National Alcohol Strategy 2019–2028. This supplement will also not recommend consuming alcohol for health benefits, because: (i) the latest research indicates there are no net health benefits from alcohol use; (ii) there is a clear link between alcohol use and harm; and (iii) there is a risk that a non-drinker will develop an alcohol use disorder if we recommend drinking alcohol. Broadly, this supplement will provide information on four key areas:

^{*}Joint first authors

1 National Health and Medical Research Council guidelines to reduce health risks from drinking alcohol¹⁹

reduce health risks from drinking alcohol ¹⁹ Guideline Description				
1: Reducing the risk of alcohol-related harm for adults	 To reduce the risk of harm from alcohol-related disease or injury, healthy men and women should drink no more than 10 standard drinks a week and no more than 4 standard drinks on any one day. The less you drink, the lower your risk of harm from alcohol. 			
2: Children and people under 18 years of age	 To reduce the risk of injury and other harms to health, children and people under 18 years of age should not drink alcohol. 			
3: Women who are pregnant or breastfeeding	 To prevent harm from alcohol to their unborn child, women who are pregnant or planning a pregnancy should not drink alcohol. For women who are breastfeeding, not drinking alcohol is safest for their baby. 			

- Screening and assessment (Chapter 2): screening techniques to identify patients with alcohol problems, and subsequent assessments for clinicians to undertake before providing specific treatments or interventions.
- Interventions, treatments, relapse prevention and aftercare (Chapter 3): a range of varying interventions and treatments, including brief interventions, brief e-health interventions, psychosocial interventions, alcohol withdrawal management, pharmacotherapy options, and peer support programs. In the final section of this chapter, relapse prevention, aftercare, and long term follow-up strategies are discussed.
- Considerations for specific populations (Chapter 4): the management of alcohol problems and treatment considerations for specific population groups of interest in Australia gender-specific considerations, adolescents and young people, pregnant and breastfeeding women, Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse groups, sexually diverse and gender diverse populations, older people, and cognitively impaired people.
- Understanding comorbidities (Chapter 5): the importance of considering a range of comorbidities when providing treatment for alcohol problems. Polydrug use, comorbid mental disorders, and physical-related comorbidities are discussed.

The content of this supplement is based on the various chapters of the full Guidelines for the Treatment of Alcohol Problems,

2 Levels of evidence ²¹			
Grade of recommendation	Description		
А	Body of evidence can be trusted to guide practice		
В	Body of evidence can be trusted to guide practice in most situations		
С	Body of evidence provides some support for recommendation(s) but care should be taken in its application		
D	Body of evidence is weak and recommendation must be applied with caution		
GPP	Good practice point, but there is insufficient direct evidence for a higher grade		

which were based on reviews of the evidence, including well designed meta-analyses and randomised controlled trials, wherever possible. Where this evidence was not available, recommendations were based on the best available research or clinical experience. Each recommendation in the guidelines is accompanied with a level of evidence based on National Health and Medical Research Council evidence recommendations (Box 2),²¹ with "A" representing the most evidence and "GPP" (good practice point) indicating a recommendation with no evidence.

For more on the Guidelines for the Treatment of Alcohol Problems, visit https://alcoholtreatmentguidelines.com.au/.

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Chapter 2 Screening and assessment for unhealthy alcohol use

John B Saunders¹, Daniel Stjepanović¹, Jason P Connor^{1,2}

n this chapter, we provide the rationale for, and an outline of, screening for unhealthy alcohol use. This may be a prelude to brief intervention to reduce alcohol-related harm or may lead to more detailed assessment and relevant management. The components of such an assessment are described, encompassing measures of alcohol intake, dependence, alcohol-related harm, and risk to self and others. Assessment should lead to definitive diagnosis and a clear, mutually acceptable treatment plan that identifies specific interventions to meet the patient's needs.

Screening

Screening for unhealthy alcohol use facilitates early detection of patients with this condition who could benefit from brief therapy and/or further assessment and treatment. Its aims are to:

- help the patient understand the risks posed by their current level or pattern of alcohol consumption;
- help the practitioner gauge whether the patient has unhealthy alcohol use, as defined by a risky or hazardous pattern of consumption, problems arising from their drinking, or a disorder such as alcohol dependence;
- facilitate follow-up as appropriate with a brief intervention;
 and
- pave the way for further assessment or referral for ongoing treatment.

In all, screening aims to contribute to the wellbeing of the patient, to prevent continuation or worsening of unhealthy alcohol use, and thereby prevent the development of disorders such as alcohol dependence and chronic alcohol-related diseases. The rationale for screening is that there is substantial under-recognition in primary and secondary care of unhealthy alcohol use. ¹

What is unhealthy alcohol use?

Unhealthy alcohol use is an umbrella term which encompasses alcohol consumption that poses a risk of harm (hazardous or risky use), has caused physical or mental harm (harmful use), or constitutes an alcohol use disorder or alcohol dependence.^{2,3} In essence, it indicates alcohol use which has reached the point where action to modify it is preferable to no action.

There is a spectrum of alcohol use and unhealthy use (Box 1). Hazardous (risky) alcohol use, which is a new diagnosis in the International Classification of Diseases, 11th revision (ICD-11), indicates there is a risk of harm in cases where no harm has yet occurred. Harmful (pattern of) alcohol use is an ICD-11 diagnosis which indicates a pattern of alcohol consumption that has caused physical or mental harm. Alcohol use disorder is a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) of repeated alcohol consumption which has led to symptoms of alcohol dependence and social

Summary of recommendations and levels of evidence

Screening

- Screening for unhealthy alcohol use and appropriate interventions should be implemented in general practice (Level A), hospitals (Level B), emergency departments and community health and welfare settings (Level C).
- Quantity-frequency measures can detect consumption that exceeds levels in the current Australian guidelines (Level B).
- The Alcohol Use Disorders Identification Test (AUDIT) is the most effective screening tool and is recommended for use in primary care and hospital settings. For screening in the general community, the AUDIT-C is a suitable alternative (Level A).
- Indirect biological markers should be used as an adjunct to screening (Level A), and direct measures of alcohol in breath and/or blood can be useful markers of recent use (Level B).

Assessment

- Assessment should include evaluation of alcohol use and its effects, physical examination, clinical investigations and collateral history taking (Level C).
- Assessment for alcohol-related physical problems, mental health problems and social support should be undertaken routinely (GPP).
- Where there are concerns regarding the safety of the patient or others, specialist consultation is recommended (Level C).
- Assessment should lead to a clear, mutually acceptable treatment plan which specifies interventions to meet the patient's needs (Level D).
- Sustained abstinence is the optimal outcome for most patients with alcohol dependence (Level C).

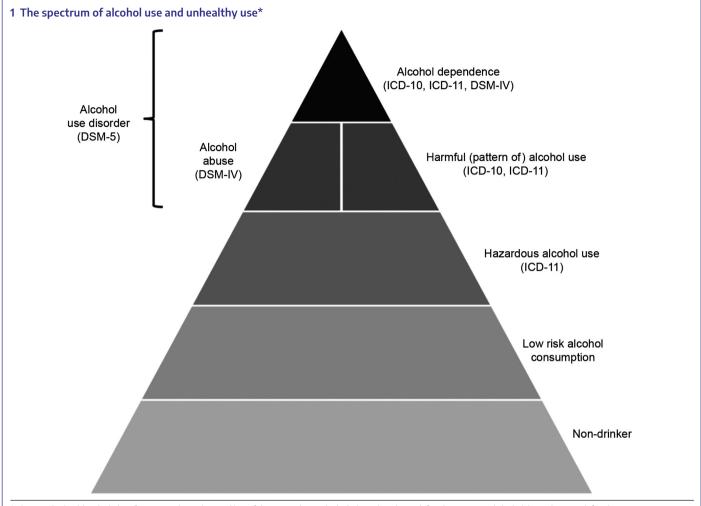
problems.⁶ Alcohol dependence is defined in the ICD-11 as a disorder of alcohol regulation characterised by a "strong internal drive to use alcohol" and comprising two or more of the following: impaired control over alcohol use (eg, its onset, level or termination); increasing priority of alcohol over other activities and responsibilities; and physiological features such as tolerance or withdrawal.^{4,5}

Where to screen

Screening can be conducted, using a brief questionnaire or a few questions in the clinical assessment, in settings where unhealthy alcohol use is likely to be detected and where it would be regarded as appropriate for the health professional and likely to benefit the patient. These settings include:^{3,7,8}

- · general practice;
- · community health services;
- hospital outpatient clinics and wards; and
- emergency departments.

Screening can be undertaken while a patient is in the waiting room by means of a paper questionnaire or an electronic device. This saves significant time for all concerned. In some countries, screening is an established part of the health care system and incentives are provided — for example, they form key



* The term "unhealthy alcohol use" comprises hazardous and harmful use together with alcohol use disorder as defined in DSM-5 and alcohol dependence as defined in ICD-11.

DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, 4th edition; DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, 5th edition; ICD-10 = International Classification of Diseases, 10th revision; ICD-11 = International Classification of Diseases, 10th revision.

performance indicators in Scotland. Systematic screening is now recommended by the World Health Organization,³ the United States Preventive Services Task Force⁷ and the full Guidelines for the Treatment of Alcohol Problems⁸ summarised in this supplement. In general practice, screening may be undertaken when the patient attends the practice for the first time and/or periodically (eg, every 2 years) as part of a health check. In addition, self-administered screening is possible through websites and apps.

Screening techniques

A quantitative history of frequency of alcohol consumption (eg, days per week drinking) and quantity of alcohol consumption (eg, number of standard drinks per day) can help detect risky patterns of alcohol use.

In addition, several standardised questionnaires can be used to screen for unhealthy alcohol use. The Alcohol Use Disorders Identification Test (AUDIT) is a screening and brief assessment instrument that comprises ten questions that focus on the previous 12-month period (Box 2):

- questions 1–3 inquire about alcohol consumption;
- questions 4–6 inquire about potential dependence on alcohol; and

• questions 7–10 inquire about alcohol-related problems, including concerns expressed by others.

The AUDIT and its shorter forms — such as AUDIT-C, which comprises the first three consumption questions, and AUDIT-3, which comprises question 3 only — are widely used. 9-11 On the full AUDIT questionnaire, a score of 8 or more points to hazardous or harmful alcohol consumption and a score of 15 or more points to likely alcohol dependence. A score of 5 or more on the first three questions (AUDIT-C) indicates likely unhealthy alcohol use. The AUDIT is available in a self-administered electronic format (https://auditscreen.org).

Signs on physical examination

While there are well recognised physical pointers to unhealthy alcohol use, these tend to occur in those who have high level and longstanding alcohol consumption.¹² The following may be observed without formal physical examination:

- smell of alcohol on breath;
- facial stigmata such as erythema, telangiectasia and conjunctival injection;
- bruises, especially of different ages; and
- tremor and sweating (indicative of alcohol withdrawal).

2 Alcohol Use Disorders Identification Test (AUDIT) questionnaire* drink Questionnaire 1 standard drink = **Dear Patient** As part of my service I am examining lifestyle issues likely to affect the health of my patients. This will assist me in giving the best treatment possible. To help me do this, could you please complete this questionnaire middy of beer small glass of wine nip of spirits in the waiting room before your appointment. When you have finished, (285mls) (100 mls) please hand it back to the receptionist. I will explain the results to you 1.5 standard drinks = during your consultation. Your answers to these questions will be treated in strict confidence. OR OR 1 schooner 1 stubby Name (425 mls) (375 mls) _ Sex Male □ Female □ 1. How often do you have a drink containing alcohol? Monthly or less \square 2 to 3 times a week 4 times a week or more \square 2-4 times a month 2. How many standard drinks do you have on a day when you are drinking? 7-9 🗆 1or 2 🗆 3 or 4 🗆 10 or more □ 3. How often do you have 6 or more standard drinks on one occasion? Never Less than monthly Monthly □ Weekly Daily or almost daily 4. How often during the last year have you found that you were not able to stop drinking once you had started? Less than monthly Monthly □ Weekly Daily or almost daily 5. How often during the last year have you failed to do what was normally expected of you because of your drinking? Less than monthly Daily or almost daily \square Never Monthly Weekly 6. How often during the last year have you needed a drink in the morning to get you going after a heavy drinking session? Monthly □ Weekly Daily or almost daily Never □ Less than monthly 7. How often during the last year have you had a feeling of guilt or regret after drinking? Weekly Daily or almost daily Less than monthly \square Monthly \square Never 8. How often during the last year have you been unable to remember what happened the night before because you had been drinking? Never □ Less than monthly \square Monthly \square Weekly Daily or almost daily \square 9. Have you or someone else been injured as a result of your drinking? Yes, but not in the last year \square Yes, during the last year □

Office use only

Advised □ Booklet □

Yes, during the last year \square

No 🗆

10. Has a friend, relative, doctor or other health worker been concerned about your drinking or suggested you cut down?

Yes, but not in the last year \square

^{*} Responses to questions 1 to 8 are scored (from left to right) 0, 1, 2, 3 or 4; responses to questions 9 and 10 are scored 0, 2 or 4. lacktriangle

3 Sensitivity and specificity of alcohol use biomarkers ¹³				
Parameter	Sensitivity	Specificity	Medicare rebated?	
γ-glutamyltransferase (GGT)	37–95%	18–93%	Yes	
Aspartate aminotransferase (AST)	25–60%	47–68%	Yes	
Alanine aminotransferase (ALT)	15–40%	50-57%	Yes	
Mean corpuscular volume (MCV)	40-50%	80-90%	Yes	
Carbohydrate transferrin (CDT)	46–90%	70–100%	No	
Ethyl glucuronide (EtG) in urine	89%	99%	No	

Hypertension is also a common manifestation of unhealthy alcohol use. However, there may be no signs in someone with a lower level of unhealthy alcohol use.

Biological markers

Testing for two types of biological markers can provide useful adjunctive information to screening for unhealthy alcohol use. First, levels of alcohol, or direct metabolites, detected in blood, urine or breath can be measured; second, markers of the pathophysiological effects of alcohol on organs and body systems can be used (Box 3).¹³

Breath and blood alcohol testing is undertaken in several settings, the most common in everyday experience being random breath testing of drivers. It is also undertaken after motor vehicle and industrial accidents, and in therapeutic settings to identify intoxication, monitor adherence to treatment and provide therapeutic feedback. There is some evidence to support alcohol breath testing in occupations where safety is critical. Metabolites of alcohol may be assayed, typically in urine; most commonly, ethyl glucuronide levels are tested, but there is no Medicare rebate for this assay.

Many indirect markers can also be used, which include common liver function tests. Serum γ -glutamyltransferase is the most well known, although its levels are also raised in people with obesity and those taking certain medications. The sensitivity and specificity values of alcohol use biomarkers are shown in Box 3. Carbohydrate deficient transferrin is a sensitive and highly specific marker of unhealthy alcohol use and is also commonly used in regulatory monitoring procedures. However, testing for it is not reimbursed by Medicare.

Responding to screening results

A positive finding on screening can lead to confirmatory questions to identify the level of the patient's unhealthy alcohol use. If the patient has alcohol use disorder or alcohol dependence, or has experienced significant physical or mental harm, a more comprehensive clinical assessment is indicated. If not, a brief intervention is appropriate⁸ (Box 4).

Assessment

More comprehensive assessment, which may have to be undertaken on a separate occasion, can:

- enable a diagnosis to be made confidently;
- enable the patient and clinician to identify shared goals and develop a treatment plan; and
- enhance the patient's commitment or motivation to modify their alcohol intake (in some cases in the direction of abstinence) and related behaviour and risks.

Assessing alcohol use and its effects

Assessment of alcohol use should include evaluation of:

- level and pattern of alcohol consumption;
- presence and severity of dependence; and
- alcohol-related physical, psychological and social harms.¹²

The full AUDIT questionnaire (Box 2) can be used as a convenient assessment framework as it taps directly into these three domains (see above). In doing so, it points to the diagnoses of risky or hazardous alcohol consumption, harmful alcohol consumption (or a mild alcohol use disorder), and alcohol dependence (equivalent to a medium–severe alcohol use disorder).

In addition, assessment should evaluate:14

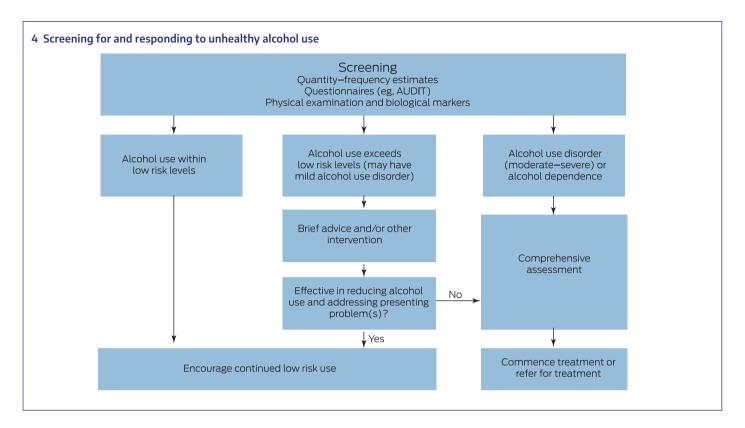
- the patient's motivation to change their alcohol use pattern;
- underlying issues, including the patient's family history and early life experiences; and
- the patient's cognitive functioning.

The extent of the assessment must be balanced with the desire to engage with the patient and retain them in treatment. If the patient feels that a lot of information is being obtained but that there is no clear pathway ahead for them, their motivation may wane. The aim is for the patient to become more confident of the appropriateness of the advice and understand the help available. It is very important to instil a sense of hope and that change is possible. This sense of self-efficacy is an important factor in treatment success.

Assessing physical disease

With greater severity of unhealthy alcohol use, there is more likelihood of physical sequelae developing, so evaluation should include an assessment of:

- medical disorders that have a known relationship with alcohol use:
- experience of accidents and other forms of trauma (often related to alcohol);
- current physical symptoms (eg, heartburn, weight loss or gain, bowel disturbance, and abdominal pain); and
- physical examination that looks for pointers to withdrawal, cutaneous stigmata and signs of liver and other organic disease.



Any available laboratory test results from such assessment may then be relayed to the patient.

Assessing mental health disorders

Mental health disorders and predisposing experiences (such as abuse and trauma) are more prevalent among patients with unhealthy alcohol use compared with the general population.¹⁴ Such problems can include:

- anxiety (especially social anxiety), intermittent or chronic depression, and post-traumatic stress disorder;
- suicidal ideation and a history of suicide attempts;
- adverse childhood experiences, including physical, sexual and emotional abuse; and
- abuse in earlier adult life, including intimate partner and family abuse and violence, and occupational trauma.

Sometimes the mental health disorder is the underlying condition, and sometimes it is a complication of alcohol use (eg, alcohol-induced mood disorder). In other cases, there is no clear cause-and-effect relationship but a bidirectional (vicious circle) relationship. Various copyright-free mental health assessment tools may be employed, such as the Depression, Anxiety and Stress Scale (DASS)¹⁵ and the Kessler Psychological Distress Scale.¹⁶

Assessing social problems

Problems with relationships, work, finances and accommodation may be the reason why someone with unhealthy alcohol use seeks advice and help from health and welfare services. Part of the assessment may focus on these issues and a checklist of common social problems can be employed.¹²

Assessing motivation

The patient's level of commitment and therefore motivation to change is an important predictor of outcome. 11,17 Questions that may be useful include "How interested are you in changing your drinking?" or, to avoid any sense of being judgemental, "How do you feel about your drinking at the moment?". Contemplative responses such as "I'm thinking about stopping" or action-oriented responses such as "I want to stop now" point to a greater likelihood of engagement and change. Motivation to change should therefore be assessed as it can inform the strategy to engage the patient further in treatment.

Collateral information

Information from family members (where possible and subject to ethical considerations) can be extremely useful, particularly where there is a discrepancy in information — for example, when the patient's stated alcohol consumption is less than what results of biological tests would suggest. Family members may be concerned about problems related to alcohol use which the patient has not reported.

Other aspects of assessment

Other questions to explore during assessment include:

- Has the patient's unhealthy alcohol use caused personal or broader social problems?
- Is there a child younger than 16 years who is at risk of abuse or not having their basic needs met?
- Is there a risk of suicide?
- Is there a risk of violence?
- Is there a risk of injury and physical safety?^{12,14,17}

Treatment planning

Assessment should therefore lead to a clear, mutually acceptable treatment plan that identifies specific interventions to meet the patient's needs. There are many forms of treatment described in the other chapters of this supplement. The goals are important and, depending on the patient and what can be agreed on, they may entail either abstinence from alcohol (preferable for those with an established alcohol use disorder or alcohol dependence) or moderated and reduced consumption (more suitable for those with risky or hazardous use). For those without features of dependence, safe drinking levels based on current National Health and Medical Research Council guidelines to reduce health risks from drinking alcohol should be recommended.¹⁸

Relapse is a common problem in alcohol treatment. Relapse prevention interventions using cognitive behavioural strategies and/or medication should be considered. Structured cliniciandriven aftercare in the period following intensive treatment may be particularly suited to individuals with severe dependence. Given the nature of alcohol dependence, persistence in treatment over a longer term follow-up period is an important part of treatment. If unhealthy alcohol use can be identified earlier, there is an opportunity to prevent what may otherwise have a chronic course.

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Chapter 3 Caring for and managing patients with alcohol problems: interventions, treatments, relapse prevention, aftercare, and long term follow-up

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n this chapter, we provide brief descriptions and the best evidence for brief interventions, brief e-health interventions, psychosocial interventions, alcohol withdrawal management, pharmacotherapies, peer support programs, and aftercare and long term follow-up.

Brief interventions

Brief psychosocial interventions for people experiencing problems with their drinking integrate feedback from screening and assessment with the provision of advice and information to achieve a reduction in alcohol use and/or alcohol-related problems. Most brief interventions use motivational interviewing (MI) techniques to achieve these goals. There is considerable variability in the duration of brief interventions, ranging from one to four sessions of between 5 and 30 minutes each.

Brief interventions are often delivered as the first step of treatment, either as a standalone treatment or as a motivational prelude to pharmacological and/or more intensive psychosocial treatment for those experiencing problems with their alcohol use. They are also offered opportunistically to people who present to other settings (eg, emergency departments and general practice) with alcohol-related problems, but who have not sought treatment.

Key components of brief interventions

Motivational interviewing

Most brief interventions are delivered in the spirit of MI, which uses a collaborative, evocative and compassionate approach, to increase a client's sense of autonomy and readiness for change. This client-centred approach facilitates treatment engagement and behaviour change by assisting clients to explore and resolve ambivalence about changing their alcohol use. Four basic principles of MI are used to enhance a client's motivation and commitment for change: express empathy; highlight discrepancies; support self-efficacy; and resist the "righting reflex", which describes a health professional's urge to tell a client how to solve their problem. Page 1997.

Screening, feedback and information

Brief screening tools can be used to identify people with problematic alcohol use who may be suitable for a brief intervention.

Summary of recommendations and levels of evidence

Brief interventions

- Brief motivational interviewing interventions are more effective than no treatment for people who consume alcohol at risky levels (Level A).
- Their effectiveness compared with standard care or alternative psychosocial interventions varies by treatment setting. They are most effective in primary care settings (Level A).

Psychosocial interventions

- Cognitive behaviour therapy should be a first-line psychosocial intervention for alcohol dependence. Its clinical benefit is enhanced when it is combined with pharmacotherapy for alcohol dependence or an additional psychosocial intervention (eg, motivational interviewing) (Level A).
- Motivational interviewing is effective in the short term and in patients with less severe alcohol dependence (Level A).
- Residential rehabilitation may be of benefit to patients who have moderate-to-severe alcohol dependence and require a structured residential treatment setting (Level D).

Alcohol withdrawal management

- Most cases of withdrawal can be managed in an ambulatory setting with appropriate support (Level B).
- Tapering diazepam regimens (Level A) with daily staged supply from a pharmacy or clinic are recommended (GPP).

Pharmacotherapies for alcohol dependence

- Acamprosate is recommended to help maintain abstinence from alcohol (Level A).
- Naltrexone is recommended for prevention of relapse to heavy drinking (Level A).
- Disulfiram is only recommended in close supervision settings where patients are motivated for abstinence (Level A).
- Some evidence for off-label therapies baclofen and topiramate exists, but their side effect profiles are complex and neither should be a first-line medication (Level B).

Peer support programs

 Peer-led support programs such as Alcoholics Anonymous and SMART Recovery are effective at maintaining abstinence or reductions in drinking (Level A).

Relapse prevention, aftercare and long-term follow-up

- Return to problematic drinking is common and aftercare should focus on addressing factors that contribute to relapse (GPP).
- A harm-minimisation approach should be considered for patients who are unable to reduce their drinking (GPP).

Personalised, informal feedback from the screening tools is typically delivered. This may include information on the frequency, quantity or severity of the individual's alcohol use and related problems, and how this compares with clinical or population

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norms. Information on the psychological, social and physical consequences of alcohol use, and advice on harm-minimisation strategies (eg, setting limits) for reducing risk of alcohol-related harm, are also commonly provided. This process provides an important opportunity to increase the individual's awareness of their alcohol use and enable them to explore and understand its consequences.

Goal setting

People who acknowledge that they may be drinking too much might be willing to set goals for making a change in their alcohol use. These goals need to be specific, realistic, and achievable, and a plan for how they can make changes to meet these goals should be developed. Some people may not perceive change as necessary, so MI and information about the potential consequences of continued alcohol use may help them recognise that their alcohol use is excessive. If an individual is still not receptive to making a change in their alcohol use, it may be useful to focus on how they can make a change in their alcohol-related behaviour to reduce their risk of harm (eg, drink water and eat first).

Referral to treatment

People who are still drinking to excess following a brief intervention can be referred to more intensive psychosocial treatment for alcohol use.³

Effectiveness of brief interventions

Brief interventions that incorporate MI are superior to no treatment for reducing alcohol consumption in adolescents, younger adults and older adults across multiple settings, but the effects are small. ⁴⁻¹² Brief MI has not consistently been found to be more effective than standard care or alternative psychosocial treatments for reducing alcohol consumption. ^{4,5,7,8,10} For young adults, brief MI is more effective than alternative non-MI psychosocial treatments, but the effects are very small. ¹¹ It is not clear whether people with alcohol dependence are more or less likely to benefit from brief MI. ⁴⁻¹²

Brief interventions can be delivered in a variety of settings, including primary care (general practice, emergency departments, general hospital inpatient wards and outpatient clinics), higher education settings, alcohol and other drug treatment services, community counselling and welfare services, justice settings, and workplaces. However, the levels of evidence for the effectiveness of brief interventions in each setting vary, and evidence is strongest in primary care settings (see full Guidelines for the Treatment of Alcohol Problems at https://alcoholtreatmentguid elines.com.au for a more thorough review).¹³

Using brief MI across a variety of settings has the potential to provide large numbers of people with access to treatment for alcohol use. While the effects are small, brief MI interventions delivered at a population level could help reduce the impact of alcohol on the burden of disease and injury in Australia.

Brief e-health interventions

Despite the promise of brief in-person interventions, there are several barriers that may prevent treatment (eg, lack of time, limited access to health professionals trained in brief intervention, lack of resources, costs and stigma). Brief e-health interventions (internet-based interventions delivered via mobile phones or computers) can overcome some traditional barriers because they are typically short, can be accessed at the user's discretion,

are easy to implement without special training, are cheaper than in-person interventions, have demonstrated good acceptability among people with alcohol use problems, and may reduce some of the stigma associated with seeking treatment.¹⁶ Overall, brief e-health interventions are effective in reducing the amount of alcohol consumed, but (similar to brief interventions) the effects are small.^{16,17} Furthermore, although e-health interventions appear to have a similar effect to brief interventions over the short term, in-person interventions may be more effective in the long term.¹⁸

Despite the promise of e-health interventions, there are limitations. The main concern is that most e-health interventions with evidence of efficacy from research are not made available to non-research populations (ie, are not made freely available or accessible on an application store following trials). In addition, tools that do not have an evidence base may be inaccurate or include fewer behaviour change techniques (which could limit their effectiveness). Therefore, it is important to select an e-health intervention with an evidence base (ie, tools accessed from websites such as Beacon, an Australian website that rates e-health tools) or from trusted sources (eg, Head to Health, an initiative of the Australian Government Department of Health). 20,21

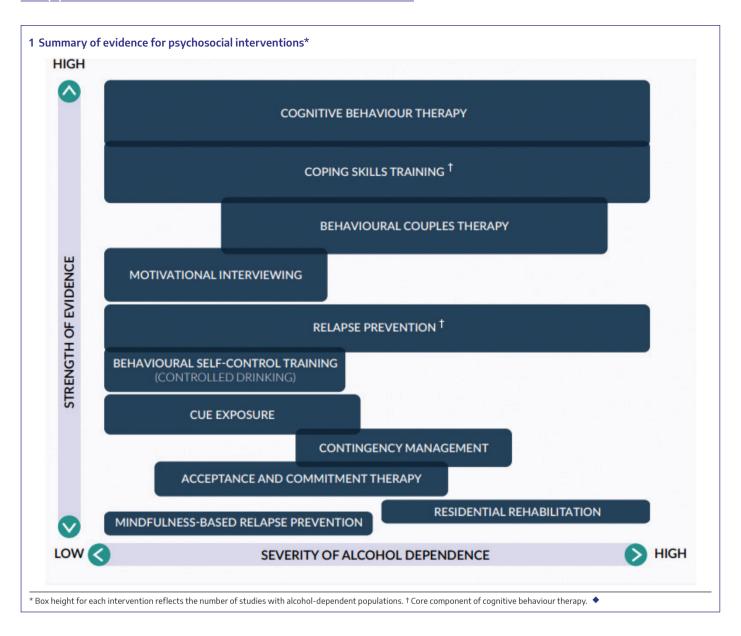
Psychosocial interventions

Psychosocial treatments encompass a wide range of non-pharmacological approaches commonly used to treat alcohol dependence. Many derive from social learning theory and share the basic tenet that, although biological factors play a significant role, problematic patterns of drinking are a learned behaviour. Therefore, they can be replaced with more adaptive learned behaviour (eg, coping skills). Psychosocial interventions are effective for patients with alcohol dependence and those with more severe alcohol-related problems (eg, causing physical or mental harm to themselves or others) that cannot be effectively managed with brief interventions. ²⁴

Evidence has consistently shown that people who receive psychosocial interventions benefit substantially, with clinically significant reductions in alcohol consumption and improvement in overall functioning.²⁵ Psychosocial interventions can be implemented individually or in groups, and can be used as standalone treatments or used in combination with other treatments (eg, pharmacotherapy).²⁶ They can be delivered by a range of health practitioners in a variety of settings, but most patients prefer psychiatric or addiction specialist treatment.²⁷ Specialist treatment produces better outcomes.²⁸ There is clear evidence that patients with an alcohol abstinence goal tend to have better outcomes when treatment is combined with pharmacotherapy.²⁹ Decisions concerning choice of psychosocial intervention should be guided by the principles of patient-centred care, which incorporate shared decision making.³⁰ Recommendations rest largely on the strength of accumulated evidence for different interventions and patient preference (Box 1). 31,32

Cognitive behaviour therapy

Cognitive behaviour therapy (CBT) should be employed as a first-line psychosocial intervention for alcohol dependence. ^{26,31,32} It addresses cognitive, affective and situational triggers for drinking and usually involves about 12 weekly sessions. The goal is to help patients feel more confident in their ability to control their drinking by developing effective coping strategies. Clinical benefit is enhanced when CBT is combined with pharmacotherapy or another psychosocial intervention (eg, MI). ²⁶



Motivational interviewing

MI, a component of brief interventions, is effective as a standalone intervention in the short term and in patients with less severe alcohol dependence. It is a style of counselling that focuses on helping the individual explore and resolve ambivalence about change to motivate reduction in drinking. Because of its typically brief duration, it is often employed as a prelude to CBT.

Mindfulness and acceptance-based interventions

Mindfulness and acceptance-based interventions, particularly mindfulness-based relapse prevention and acceptance and commitment therapy have become more commonly employed in mental health. The goal of acceptance and commitment therapy is to foster acceptance of undesirable cognition and affect (eg, craving), and facilitate action tendencies that will lead to improvement in life circumstances. However, there is limited and mostly low quality evidence on the use of these interventions for alcohol dependence, so they should not be offered as first-line treatment.

Residential rehabilitation programs

Residential rehabilitation usually involves patients living and working in a community of other people seeking treatment for substance use and involvement of specialist staff. These programs can be as short as 1 month or as long as 24 or more months. They are designed to help people develop the skills and attitudes to make long term positive changes towards ceasing alcohol and/or drug use and generally include drug withdrawal management. Residential rehabilitation programs may be of benefit for patients with moderate-to-severe alcohol dependence and who need a structured residential treatment setting. While there is evidence showing that residential rehabilitation reduces substance use during the residential program, its long term effectiveness is unknown due to methodological shortcomings in the available research.³³

Alcohol withdrawal management

Chronic heavy alcohol use is associated with downregulation of gamma-aminobutyric acid (GABA) receptors and increased

expression of N-methyl-D-aspartate (NMDA) receptors.³⁴ Cessation or reduction of alcohol consumption may induce disinhibition of several neurotransmitter systems, leading to a withdrawal syndrome. Risk factors include regular daily consumption of more than 80 grams of alcohol per day, previous withdrawal, and intercurrent illness including cessation of other drugs. Alcohol withdrawal symptoms range from trivial to severe life-threatening complications (eg, seizures and delirium). However, mortality is low with good clinical care.

As shown in Box 2, withdrawal symptoms generally start 6–24 hours after the last drink, peak at 24–48 hours and subside within 2–4 days, but may last a week; cravings, mood changes and sleep disturbances may persist for several weeks.³⁵ Clinical features include autonomic hyperactivity (sweating, tachycardia, hypertension, tremor and low grade fever), gastrointestinal disturbance (anorexia, nausea, vomiting, dyspepsia and diarrhoea), and central nervous system disturbance (anxiety, poor concentration, agitation and disturbed sleep).

Assessment of withdrawal

Assessment of withdrawal should include history taking and an examination (Box 3).

Withdrawal setting

In most cases, alcohol withdrawal can be safely completed in the patient's home (ambulatory withdrawal) if they have sufficient support. However, contraindications to ambulatory withdrawal include: severe complications in a previous withdrawal attempt (eg, seizures, delirium or psychosis); unstable medical or psychiatric problems (eg, suicide risk or recent head injury); concurrent drug use (particularly benzodiazepines); unsuitable home environment or homelessness; drug or alcohol use by others in

the home; no suitable support person in the home; and repeated failed attempts at ambulatory withdrawal.

Unsuitable patients should be referred to specialist services for residential withdrawal management. Severe medical conditions (eg, recent seizure or delirium) or psychiatric conditions may warrant hospital admission.

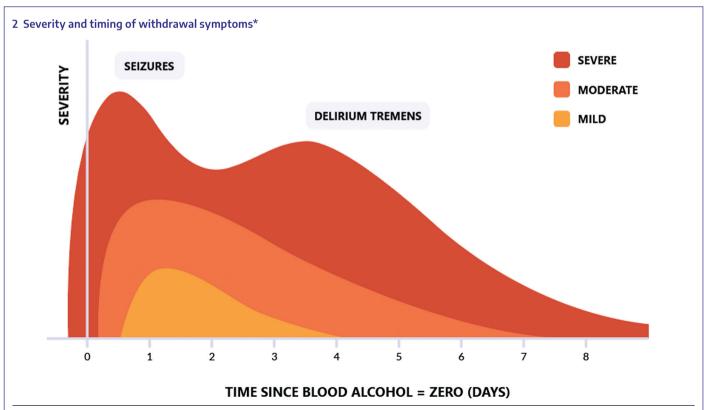
Management of ambulatory alcohol withdrawal

It is important to provide information about alcohol withdrawal to patients and carers, such as the likely short duration of withdrawal and the very high relapse rates without further treatment. Monitoring and supportive counselling should be provided from health workers (eg, general practitioners, drug and alcohol workers, and nurses) and should focus on strategies for coping with withdrawal symptoms, maintaining motivation and reassurance (daily if possible). Linking the patient to a 24hour telephone counselling service or crisis telephone service can also be of value.

Nutrition and medication

Nutrition advice should include drinking plenty of fluids (2 litres per day minimum) and avoiding heavy meals. Thiamine supplements (300 mg per day for 7 days) should be provided orally if the patient is well or by intramuscular injection if they are nutritionally depleted. For suspected Wernicke encephalopathy, higher thiamine doses are recommended initially (500 mg total dissolved solids by intravenous infusion) with ongoing treatment guided by specialist advice (see the full guidelines at https://alcoholtreatmentguidelines.com.au for additional information). ¹³

Benzodiazepines are the preferred medication, supported by Level A evidence, and suppress GABA activity. A typical



* Seizures (tonic-clonic) usually occur 6-48 hours after last drink, delirium usually occurs 2-5 days after last drink, and hallucinations can occur at any time during withdrawal. Acknowledgement: Bridin Murnion (Senior Lecturer in Addiction Medicine, University of Sydney) contributed to development of this figure.

3 Assessment of withdrawal

- History taking should cover:
 - motivation and a realistic plan for abstinence; if not, other treatment options should be considered;
 - alcohol and other drug use, including quantity, frequency, duration, time of last use, and features of use disorder;
 - previous withdrawal attempts and any complications (seizures, delirium and hallucinations);
 - home environment and social supports; and
 - medical and psychiatric conditions.
- Examination should include:
- vital signs (blood pressure, pulse rate and body temperature), hydration, mental state, evidence of intoxication, withdrawal signs (tremor, anxiety, sweating and tachycardia);
- signs of liver disease and other complications of alcohol use; and
- investigations breath or blood alcohol test, liver function tests, full blood count and biochemistry.

regimen for oral diazepam is provided in Box 4. Diazepam access should be managed with daily pickup from a pharmacy or clinic, or supervised by a responsible adult, and diazepam use should be limited to a duration of 5 days. If the patient continues to drink or is sedated, doses should be withheld. Medications for symptom management can be administered as required (eg, paracetamol, metoclopramide, hyoscine and loperamide).

Medications not usually recommended for withdrawal include anticonvulsants, chlormethiazole, antipsychotics and antidepressants. Administration of alcohol is not recommended to suppress alcohol withdrawal.

Pharmacotherapies for alcohol dependence

Pharmacotherapy should be considered for all patients with moderate-to-severe alcohol use disorders following medicated alcohol withdrawal if necessary, in association with psychosocial support (see Chapter 2 of this supplement for an overview). Acamprosate, naltrexone and disulfiram have been approved for use and are available in Australia for alcohol use disorders. Acamprosate and naltrexone have been shown to improve treatment outcomes. Although the evidence for disulfiram is weaker, it remains an option in certain circumstances. ³⁶

First-line pharmacotherapies: Therapeutic Goods Administration-approved medications

Acamprosate (subsidised by the Pharmaceutical Benefits Scheme [PBS] as an authority item) acts by modulating GABA and glutamate function in the brain, reaching desired levels in the brain after 1–2 weeks. Acamprosate is effective in maintaining abstinence from alcohol and reducing the risk of returning to any drinking with a number needed to treat of 12 over placebo. ³⁶ It is contraindicated in patients with a known hypersensitivity to the

4 Oral diazepam dosages recommended for moderate-tosevere alcohol withdrawal

 Days since blood alcohol level of zero
 Diazepam dosage*

 Days 1 and 2
 5–10 mg three to four times a day

 Day 3
 5–10 mg twice a day

 Days 4 and 5
 5–10 mg at night

 *Adjust dosage according to response, predicted severity and other medical conditions. ◆

drug, renal disease or severe hepatic failure. Acamprosate therapy is initiated after resolution of any withdrawal (usually 3–7 days after the last drink). It is well tolerated and usually taken for at least 3–6 months. Mild gastrointestinal adverse effects usually resolve spontaneously within days. Given the pill burden, adherence for prolonged periods is challenging and should be specifically supported.

Naltrexone (subsidised by the PBS as an authority item) is an opioid receptor antagonist that reduces dopamine levels in the nucleus accumbens. The number needed to treat, for reducing the risk of returning to heavy drinking, is 12 over placebo.³⁶ Naltrexone is not suitable for patients on opioid therapy or who require opioid-based analgesia. Naltrexone is contraindicated for patients with acute hepatitis or severe liver failure. Naltrexone therapy is initiated after resolution of any withdrawal (usually 3–7 days after the last drink) and is usually well tolerated.³⁷ Common adverse effects include nausea and headache, which generally subside within days. Naltrexone is usually taken for at least 3–6 months. Due to hepatotoxicity and potential increases in levels of liver enzymes, liver function tests should be performed periodically. Naltrexone should be discontinued 48–72 hours before requirement of opioid analgesia (eg, elective surgery).

Disulfiram (not subsidised by the PBS) works by inhibiting the action of an aldehyde dehydrogenase that is involved in the metabolism of alcohol. This results in the accumulation of the toxin acetaldehyde following consumption of alcohol — subsequently causing flushing, dizziness, nausea and vomiting — and thereby deters drinking. The intensity of the disulfiram-alcohol reaction varies and in rare cases may result in arrhythmias, cardiovascular collapse, respiratory depression, convulsions and death (1 in 15 000 patients). Disulfiram use has been associated with greater rates of abstinence relative to control in open-label studies, especially in direct observed therapy settings.³⁸ Disulfiram is an appropriate medication for patients who are motivated to abstain from alcohol but not those who have a goal of reduced alcohol intake. Treatment should begin about 48 hours after alcohol detoxification. Close supervision of disulfiram intake (eg, by a spouse or carer) to ensure treatment adherence has been associated with greater success. In many patients, two or three doses per week may be sufficient and more practical to schedule with supervision. It should only be prescribed to patients without medical contraindications such as cardiovascular, pulmonary or liver disease. A rare but potentially fatal type of hepatoxicity can occur, so biochemical monitoring in the first 3 months of therapy is important. Alcohol metabolism returns to normal 7-10 days after stopping disulfiram therapy.

Second-line pharmacotherapies: off-label medication

Second-line agents are available for patients unresponsive to first-line medications or with contraindications to their use.

Baclofen is a ${\rm GABA_B}$ receptor agonist that may assist in achieving abstinence, but evidence remains lower than that for first-line medications. It should only be considered in specialist addiction settings for selected patients with contraindications for first-line medications, such as alcoholic liver disease. Baclofen is associated with adverse effects (including sedation) and safety concerns have been reported (including overdose). It is usually started at a low dose and judiciously titrated upwards, with weekly controlled dispensing. Treatment should not be abruptly stopped, to avoid baclofen withdrawal syndrome.

Topiramate is an anti-epileptic medication hypothesised to act by antagonising glutamate activity at glutamate receptors and inhibiting dopamine release. Topiramate has promising evidence for reducing heavy drinking³⁶ but has a complex side effect profile and should only be considered in specialist settings with careful monitoring.

Increasing medication adherence

Pharmacotherapy adherence rates for patients with alcohol use disorders are generally low in Australia. 43,44 Adherence to pharmacotherapies may be assisted by: eliciting the patient's concerns about taking medication; using cognitive restructuring techniques to change maladaptive thoughts about taking medication; and using MI techniques to help identify personal costs and benefits of taking medication.

Personalised pharmacotherapy

There is little consensus to direct a personalised approach with confidence. Altrexone may be particularly efficacious among those who drink alcohol for the rewarding effect or for those wanting to reduce heavy drinking, whereas acamprosate may be better for those who seek abstinence. Whichever clinical recommendation is made, the effect is maximised with engaged psychological therapies. Pharmacogenomic research has not yielded consistent results, so genetic testing is not currently indicated.

Social context of alcohol problems

Notwithstanding the importance of restoring neurobiological imbalances that can maintain addictive behaviours, it is important to highlight that alcohol-related problems rarely occur in isolation, so the wider social context should be appreciated. Provision of additional support regarding potential interpersonal and financial problems in addition to referral for any social problems such as housing and child welfare-related issues may be required. Re-establishment of social functioning — including relationships, healthy behaviour (such as exercise and nutrition) and employment — might thus be a significant component of longer term goals. Addressing these factors, in conjunction with pharmacological assistance, is likely to be key for treatment gains that are sustainable.

Peer support programs

In the context of addiction, peer support entails the sharing of social, emotional and practical assistance among people with a lived experience of problems with alcohol or other drugs. Peer support programs encourage discussion of experiences, provide guidance, and offer a free, accessible and widely available form of care alongside, after or outside of professional treatment for alcohol use.

Engaging in peer support groups like Alcoholics Anonymous (AA) and SMART Recovery (Self-Management and Recovery Training) has consistently been shown to enhance the gains people make in professional treatment. In Patient Pathways, one of Australia's largest treatment outcome studies, those who attended peer support groups in the year after initiating a treatment episode were significantly more likely to have reliably reduced the frequency of their drinking or to report abstinence 1 year later.⁴⁸

Alcoholics Anonymous

AA, the first 12-step model for alcohol problems, was established 85 years ago. It is the world's best known and most widely

5 Harm reduction interventions for cases in which reducing alcohol cannot be achieved³¹

- Maintain a good therapeutic alliance to facilitate treatment when the patient is ready.
- Empower family and close friends to reduce availability of alcohol and encourage clinical engagement.
- Consider medicolegal and ethical obligations such as issues relating to:
 - driving assessments;
 - child protection;
 - welfare;
 - guardianship; and
 - employment.
- Address specific medical and psychiatric conditions by:
 - providing thiamine supplements to prevent further central nervous system damage;
 - ▶ attending to advanced liver disease and other organ damage; and
 - avoiding interactions between medications for alcohol use disorders and other medications (eg, paracetamol, benzodiazepines, anticoagulants and non-steroidal anti-inflammatory drugs).
- Encourage use of psychosocial supports such as:
 - ▶ Meals on Wheels;
 - welfare:
 - employment support;
 - community and religious networks;
 - ▶ financial counselling; and
 - relationship counselling.
- Facilitate assertive outreach and involuntary models of care, subject to local availability.

accessed form of peer support for alcohol problems and is now available in over 150 countries. Its core program (based around 12 steps) promotes increased self-awareness and heightens a sense of meaning in life. In Australia, there are an estimated 20 000 members of AA and about 1800 AA groups. ⁴⁹ Despite the fact that AA has been subjected to the most rigorous research of peer support groups to date, there remains much scepticism about AA's effectiveness and philosophical approach (eg, its focus on higher power and being powerless around alcohol), with low referral rates reported among clinicians. ⁵⁰

Findings of a recent Cochrane review on the effectiveness of peer-led AA and professionally delivered or manualised treatments designed to facilitate AA involvement (12-step facilitation interventions) on the outcomes of people with alcohol use disorder showed that these approaches lead to higher rates of continuous abstinence at 1 year, when compared with conventional psychological treatments such as CBT, and are equally effective at helping people reduce alcohol-related consequences and severity of addiction.⁵¹ Adapting social networks (eg, increasing the number or proportion of non-drinking or pro-recovery peers in one's network) is one of the key mechanisms through which people benefit. 52 Participation in AA (especially when facilitated by a peer or clinician) is an effective strategy for increasing the uptake of peer support during and after treatment, and improving or sustaining treatment outcomes.⁵¹ As such, assertive referral practices are encouraged.

SMART Recovery

SMART Recovery and other secular forms of peer support have grown considerably in the past two decades. SMART Recovery was established 25 years ago and operates in 25 countries; it is free and, in Australia, offers about 250 weekly in-person or online meetings. It adopts an MI and CBT framework and is run by trained facilitators (clinicians or peers, and often both). It embraces harm reduction and recognises that greater success is achieved when individuals set realistic and achievable goals.⁵³ While based on an empirically supported theoretical framework,

Supplement

few randomised control trials have been conducted to assess its efficacy. ⁵⁴ However, evidence for SMART Recovery is beginning to emerge, with studies suggesting that many people benefit in terms of reduced drinking, improved mental health and wellbeing, and the strengthening of connections with others. ⁵⁵

Online support groups

Online peer support communities — like Counselling Online, Hello Sunday Morning, Sober in the Country and other peer support groups for people with alcohol problems — have also grown in popularity. However, evaluation of their effectiveness to date has been limited to qualitative analysis of blog posts and forum content, with preliminary evidence suggesting that engagement in Hello Sunday Morning's blog platform is associated with reductions in alcohol consumption, particularly among heavier drinkers. ⁵⁶

Peer support for family members

For family members and significant others supporting someone with an alcohol problem, the most widely established form of peer support is the 12-step based Al-Anon program, which is available Australia-wide and operates in more than 115 countries. In Al-Anon, emphasis is placed on attributing alcohol problems to the disease, rather than family members themselves, and accepting that family members have been adversely affected. There is limited research into the effectiveness of Al-Anon, although a United States study found that ongoing attendance can enhance problem-solving skills, increase wellbeing and functioning, and improve relationships with affected family members. While other support groups exist for family and significant others in Australia (eg, Family & Friends, a program offered by SMART Recovery) their effectiveness is yet to be established by empirical research.

Relapse prevention, aftercare and long term follow-up

Consumption goals

Many patients accept the need to reduce drinking but are not ready to abstain. The World Health Organization has defined four drinking risk levels (very high, high, moderate and low) with cut-offs at 60 g/day, 40 g/day and 20 g/day for women and 100 g/day, 60 g/day and 40 g/day for men, respectively. Sustained reductions of at least two risk levels are associated with meaningful clinical improvement. However, if drinking continues to exceed current Australian consumption guidelines, health risks remain.

Relapse prevention and management

Relapse to problematic drinking is common. Contributors include: persisting desire to drink, with the belief that consumption can be controlled; negative emotional states, such as frustration, interpersonal conflict, anxiety, depression and anger; positive emotional states (eg, celebration); and direct and indirect social pressure to drink.⁶¹

In relapse prevention and management, patients are taught to develop coping skills and the self-efficacy to implement these skills. Pharmacotherapy for reducing alcohol use or addressing psychological problems, such as anxiety or depression, may be integrated with psychosocial intervention.

Cognitive bias is a feature of alcohol dependence whereby many cues trigger consumption of alcohol.⁶² This process occurs, in part, outside of conscious awareness. These cognitive biases can be dampened through a computerised cognitive training intervention known as cognitive bias modification, where available.⁶²

Aftercare and follow-up

Long term follow-up is an important part of a comprehensive treatment plan. Aftercare refers to contact with a clinician or service following intensive treatment; it acknowledges that, to maintain change, ongoing monitoring and assistance is required. Aftercare is particularly helpful for people with severe dependence, whose likelihood of relapse is greatest. Goals include optimising mental and physical health and improving social functioning. It is important to develop an individual management plan, comparable to escalation planning for other disorders (such as asthma) where early recognition and management can prevent clinical relapse.

Support for people drinking at high or very high risk levels: a harm-reduction approach

Many people will not be receptive to or respond to the variety of treatment approaches aimed at reducing alcohol use. An MI approach is recommended but is often unsuccessful. Harm-reduction interventions aim to maintain a therapeutic relationship and reduce alcohol-related harms even when reducing consumption cannot be achieved (see Box 5 for examples). Several options for treatment have been shown to be effective. Dramatic clinical improvements may be seen, but treatment engagement and completion rates are ongoing challenges. There is limited evidence to favour one approach over another, so a patient-centred approach is recommended to optimise engagement. 30

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Chapter 4 Providing appropriate treatment and care to people with alcohol problems: a summary for key specific populations

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n this chapter, we provide an overview of management of unhealthy alcohol use (ie, drinking above recommended limits), including alcohol use disorder (AUD), and treatment advice for specific contexts and populations. We discuss considerations that specifically affect men, women, adolescents and youth, pregnant and breastfeeding women, Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse groups, sexually diverse and gender diverse populations, older people, and people with cognitive impairment. Rather than providing an exhaustive summary that covers all specific populations to consider when providing treatment, we discuss important considerations for key population groups.

Gender-specific issues

Men and women may experience AUDs and unhealthy alcohol use differently due to myriad sociocultural factors. Gender can therefore influence alcohol exposure and consumption patterns, the development of AUDs, treatment seeking behaviour, and provision of treatment.¹ AUDs are also more likely to be underdetected in women than men.² Given these differences, clinicians should be mindful of the influence of gender when providing care.

Domestic violence

Domestic violence and related injury are more common in women with substance use histories.³ Therefore, when screening for AUDs it is recommended that clinicians screen both women and men as possible victims or perpetrators of domestic abuse. Unsolicited disclosure of domestic abuse is uncommon and screening increases its identification.⁴ All domestic abuse screening should be trauma-informed — recognising how trauma affects people's lives and behaviour.⁵ Social historytaking can be used to screen women and men for alcohol-related violence and we recommend explicitly asking about violence as it may serve as a catalyst for help-seeking. 6 It may also be necessary to screen the partners of women with AUDs.⁷

When clinicians are discussing domestic abuse with a patient of the opposite gender, they should (where possible) ask the patient if they would like to talk to someone of the same gender. In cases

Summary of recommendations and levels of evidence

Gender-specific issues

- Screen women and men for domestic abuse (Level C).
- Consider child protection assessments for caregivers with alcohol use
- Explore contraceptive options with women of reproductive age who regularly consume alcohol (Level B).

Pregnant and breastfeeding women

- Advise pregnant and breastfeeding women that there is no safe level of alcohol consumption (Level B).
- Pregnant women who are alcohol dependent should be admitted to hospital for treatment in an appropriate maternity unit that has an addiction specialist (GPP).

Young people

- Perform a comprehensive HEEADSSS assessment for young people with alcohol problems (Level B).
- Treatment should focus on tangible benefits of reducing drinking through psychotherapy and engagement of family and peer networks (Level B).

Aboriginal and Torres Strait Islander peoples

- Collaborate with Aboriginal or Torres Strait Islander health workers, organisations and communities, and seek guidance on patient engagement approaches (GPP).
- Use validated screening tools and consider integrated mainstream and Aboriginal or Torres Strait Islander-specific approaches to care (Level B).

Culturally and linguistically diverse groups

- Use an appropriate method, such as the "teach-back" technique, to assess the need for language and health literacy support (Level C).
- Engage with culture-specific agencies as this can improve treatment access and success (Level C).

Sexually diverse and gender diverse populations

- Be mindful that sexually diverse and gender diverse populations experience lower levels of satisfaction, connection and treatment completion (Level C).
- Seek to incorporate LGBTQ-specific treatment and agencies (Level C).

- All new patients aged over 50 years should be screened for harmful alcohol use (Level D).
- Consider alcohol as a possible cause for older patients presenting with unexplained physical or psychological symptoms (Level D).
- Consider shorter acting benzodiazepines for withdrawal management (Level D).

Cognitive impairment

- Cognitive impairment may impair engagement with treatment (Level A).
- Perform cognitive screening for patients who have alcohol problems and refer them for neuropsychological assessment if significant impairment is suspected (Level A).

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where domestic abuse is identified, referral to a domestic abuse service, social worker or other specific community service should be made.

Child care

When screening for and managing alcohol-related problems in patients who are parents and caregivers of children, it is recommended that clinicians consider child care responsibilities throughout treatment planning — especially for women, who are more likely to be primary carers. A child protection assessment should be considered for anyone who has an AUD and is living with children.

Contraception

All women who use alcohol and who are of reproductive age should be reviewed for contraception, irrespective of their level of alcohol consumption. An individual woman's level of sexual activity with males can fluctuate over time, so the potential need for contraception should be discussed and periodically revisited. Evidence supports the use of long acting reversible contraceptives such as intrauterine devices and hormonal implants as these are not user dependent, so these options should be recommended.⁸

Treatment location

Gender-specific options for treatment location should be considered when there are practical considerations that warrant treatment segregation (eg, women with young children, and those with a history of sexual assault or other gender-related trauma). They should also be considered when there are programmatic considerations to be made (eg, consideration of services with integrated domestic violence or parenting programs).

Pregnant and breastfeeding women

Heavy, frequent alcohol consumption during pregnancy is harmful to the developing fetus and has been shown to cause neurodevelopmental and behavioural problems in offspring, including fetal alcohol spectrum disorder. The evidence does not indicate a safe amount of alcohol that pregnant women and breastfeeding mothers can drink, therefore not drinking is recommended as the safest option. 10

Universal screening for alcohol use in pregnancy is essential and quantity–frequency estimation is recommended to detect any consumption of alcohol. The T-ACE (tolerance, annoyed, cut down, eye-opener) tool and the TWEAK (tolerance, worried, eye-opener, amnesia, cut down) tool are screening tests that can be used to detect high risk levels of alcohol consumption in pregnant women. The Alcohol Use Disorders Identification Test – Consumption (AUDIT-C) is a simple tool for measuring the amount of alcohol consumed. Screening for substance use, mental health and family violence, plus referral and appropriate follow-up, are also essential components of integrated care plans.

Pregnant women with alcohol problems should be admitted to an appropriate hospital unit for stabilisation, assessment and care planning. Pharmacotherapy to maintain abstinence from alcohol cannot be routinely recommended during pregnancy owing to insufficient safety data.¹³ However, there is growing evidence of the effectiveness of psychological interventions for addressing alcohol use in pregnancy (ie, motivational enhancement therapy), with partner and/or family involvement where

possible.¹⁴ Cultural and social factors should be considered to ensure the appropriateness of interventions and services for women. Follow-up is strongly recommended for antenatal and post-partum care, substance use treatment, welfare support, and child protection.

Alcohol intoxication and withdrawal during pregnancy pose serious risks to the mother and baby. If a pregnant woman presents intoxicated, hospital admission may be recommended to assess fetal and maternal safety, and to enable comprehensive assessment and care planning. Alcohol withdrawal during pregnancy should be managed in a general hospital, ideally in a high risk maternity unit in consultation with a specialist drugs-in-pregnancy team. Management of infants with neonatal alcohol withdrawal should be undertaken in consultation with a specialist unit. After birth, infants born to women who have consumed alcohol regularly during pregnancy should be assessed for fetal alcohol spectrum disorder by a paediatrician aware of the mother's history, and further management should be directed by appropriate specialists.

Young people

Adolescence and young adulthood are periods of experimenting, socialising, improving one's self-reliance and flexibility, and learning to navigate an independent life path. As neurodevelopment is not complete until well into adulthood, especially in regions linked to regulation of behaviour and emotion, ¹⁶ delaying the onset of alcohol consumption is recommended. Early onset of drinking, including by parental supply, is associated with increased likelihood of AUD, difficulty with relationships, poor school performance and lower employment prospects later in life.¹⁷

Clinicians should actively reassure young people of their right to privacy and explain the confidentiality of their consultations, including its limits. A broad psychosocial history should cover the patient's home environment, education and vocational development, activities and peer relationships, drug use, mental health, sexuality, and spiritual concerns. An example of this is the HEEADSS assessment, which is shown in Box 1. Hazardous alcohol use alone is uncommon, so it is important to ask systematically about use of tobacco and other substances.

Treatment plans should generally focus on the "here and now", prioritising the tangible benefits of reduced drinking. This may include improvements in education, employment, appearance, sporting achievements and peer reputation. Involving the young person in negotiating the treatment plan facilitates engagement and, where possible, active engagement of family and peer networks is advisable. Family interventions and cognitive behaviour therapy are recommended for treatment, as there is only limited evidence for pharmacological intervention. Peer-led interventions and technologically relevant formats can also be used. When engagement is poor, specialist outreach services may be required. Withdrawal management may not be required as symptoms of alcohol withdrawal are less frequently reported in young people than in adults.

Aboriginal and Torres Strait Islander peoples

Aboriginal and Torres Strait Islander Australians are less likely to drink alcohol than non-Indigenous Australians, but those who do drink alcohol are more at risk of harm from their consumption.²⁴ Alcohol use varies between and within communities.²⁴ Unhealthy alcohol use occurs on a background of the ongoing impacts of colonisation, including transgenerational trauma,

1 The HEEADSSS assessment¹⁸

- Home: who, where, recent changes (moves or new people), relationships, stress or violence, smartphone or computer use (in home vroom)
- E Education and employment: where, year, attendance, performance, relationships and bullying, supports, recent moves, disciplinary actions, future plans, work details
- E Eating and exercise: weight and body shape (and relationship to these), recent changes, eating habits and dieting, exercise and menstrual history
- A Activities: extra-curricular activities for fun: sport, organised groups, clubs, parties, TV/computer use (how much screen time and what for)
- D Drugs and alcohol: cigarettes, alcohol and illicit drug use by friends, family and patient. Frequency, intensity, patterns of use, payment for, regrets and negative consequences
- S Sexuality and gender: gender identity, romantic relationships, sexuality and sexual experiences, uncomfortable situations/ sexual abuse, previous pregnancies and risk of pregnancy, contraception and sexually transmitted infections
- S Suicide, depression and self-harm: presence and frequency of feeling stressed, sad, down, "bored", trouble sleeping, online bullying, current feelings (eg, on scale of 1 to 10). Thoughts or actions of self-harm/ hurting others, suicide risk: thoughts, attempts, plans, means and hopes for future
- S Safety: serious injuries, online safety (eg, meeting people from online), riding with intoxicated driver, exposure to violence (school and community), if high risk carrying weapons, criminal behaviours, justice system

racism, social and economic disadvantage, and communitywide experience of grief and loss. In turn, treatment needs to include care for the whole person, in the context of family, community and culture.

Engagement with Aboriginal and Torres Strait Islander peoples

Engagement is particularly important. It is founded on respect for the patient and their culture, and on understanding of the clinician's own culture (including any privilege associated with it). Shame or fear of discrimination and legal or child protection consequences may make it hard for individuals to talk about their alcohol use. An unrushed, conversational approach helps build trust and respect. The clinician should make no assumptions about the patient, but endeavour to understand alcohol use and its context.

For patients from remote, traditional communities, clinicians should be aware of local protocols regarding interactions with the opposite gender and respect for older people, and they should seek guidance as needed. In addition, clinicians should be mindful that it can be respectful to avoid eye contact. A conversational style is important as a series of direct questions may seem intrusive or rude, and it may be helpful to start with a scenario to elicit specific information — for example, "Some people get grog shakes when they stop drinking. Some don't. What's it like for you?" Approaches that can help improve engagement with Aboriginal and Torres Strait Islander peoples are listed in Box 2.

Asking about alcohol use

To ensure that an accurate assessment of alcohol use is obtained, several factors should be considered. For example, improvised drinking containers, such as empty juice bottles, may be used and

2 How to improve engagement with Aboriginal and Torres Strait Islander peoples

- If the person seems uncomfortable in a face-to-face interview, try sitting alongside them
- Choose a less clinical setting (eg, with art on the wall, or outdoors)
- Provide holistic care, considering mental and physical health and socioeconomic needs (eg, housing, relationships with family, community and culture)
- Provide flexible access to services (eg, drop-in clinics)
- If you are not an Aboriginal or Torres Strait Islander person from the local community, work with staff who are, and with Community Controlled Health Services
- Complete cultural awareness training

kitchen tumblers may hold two or more standard drinks of wine, or several of spirits. Sharing alcohol is also common and some patients may report on how much alcohol the group drank rather than their own use. Intermittent or episodic alcohol use with "dry patches" (periods of not drinking alcohol) is common. If a person only drinks alcohol intermittently, they may think of themselves as a "non-drinker". A helpful question to ask would be "What about grand finals or sorry business [grieving after a death]?".

For screening, use a validated tool once per year (eg, the AUDIT-C²⁵). If it is hard to use AUDIT-C, ask how much was consumed during the one to two most recent drinking occasions and approximately when the last four drinking days were.²⁶ The Indigenous Risk Impact Screen (IRIS) screens for alcohol and other drug use disorders plus mental health disorders.²⁷

Further assessment of those drinking above recommended limits

Sensitive assessment of harms, using reflective listening, can help an individual consider the effects of alcohol on their life. The seven areas (or "Seven Ls") model of the Strong Spirit Strong Mind training program is one aid for this and provides guidance on delivering culturally secure services to Aboriginal communities. ²⁸

Assessments of drug use and mental health comorbidities are also helpful. Mental health comorbidities (including complex trauma) are common in people who have AUDs, especially for Aboriginal and Torres Strait Islander peoples. Withdrawal risk should also be assessed. Individuals who drink excessive amounts of alcohol intermittently may experience less (or no) withdrawal symptoms when they stop. It can be helpful to ask about tremors ("grog shakes") or seizures in the past.

Treatment and intervention

Key considerations for treating Aboriginal or Torres Strait Islander peoples who are alcohol dependent are shown in Box 3. Aim to provide a prompt, integrated and empathic response to the person's alcohol use. A range of treatment and intervention options can be offered, including both mainstream and culturally adapted or culturally specific care.

- Wherever possible, provide brief intervention or (if safe to do so) initiate treatment or harm reduction at the point of detecting unhealthy alcohol use. Do not assume that a referral will be successful.
- Ambulatory home-based withdrawal management is feasible for carefully selected patients. This could be at their own accommodation or that of a supportive non-drinking relative.

3 Key considerations for treating Aboriginal or Torres Strait Islander peoples who are alcohol dependent

- Consider patient priorities whether about health, family or community
- Offer choices some patients prefer mainstream services, some prefer Aboriginal or Torres Strait Islander-specific services
- Offer the best of Western and traditional care where possible (eg, relapse prevention medicines plus a men's or women's group)
- Explore sources of strength and support (individual, family, community or cultural)
- Where desired by the patient, members of their family or community can be involved in care
- Consider whether any drinking partner or close family member may also like treatment
- Use visual aids (eg, the Alcohol Awareness kit²⁹)
- Case management, including outreach or community case management, can support integration between stages of treatment and different services.
- Individual counselling and group approaches can be considered. A range of mainstream counselling approaches have been used with adaptation. Mutual support groups such as Alcoholics Anonymous and SMART Recovery (Self-Management and Recovery Training) can be adapted to increase acceptability and cultural appropriateness, and to be trauma informed.
- Culturally specific and culturally informed approaches have been found to be beneficial. These include Aboriginal men's groups, Aboriginal women's groups, cultural activities offered through Aboriginal Community Controlled Health Services or community, and the Strong Spirit Strong Mind training program and resources.²⁸
- Relapse prevention medicines can be used, and the choice of medicine will be affected by physical and mental health comorbidities, patterns of problematic alcohol use, and complexities of the patient's daily life. Explain the role of the medicine well, using plain language. Where helpful, draw on analogies or use non-identifiable accounts of the benefits that these medicines have provided to other individuals.
- When considering residential services, be mindful of barriers to access, including lack of a phone or transport, or a lack of family-friendly and youth services. Choose (or advocate for funding for) residential services that have staff who can manage medical comorbidity, psychiatric comorbidity or opioid substitution treatment. Arrange for withdrawal management before entry to rehabilitation, if needed, and seamless transfer. Residential services should ensure their programs are culturally secure.

Considering comorbidities and other conditions

The whole person's health and wellbeing should be considered, in the context of family and community.

- Consider mental health and wellbeing, including the impact of stress, grief or trauma as a causative or perpetuating factor for unhealthy drinking³⁰ and offer support and/or treatment in a culturally secure way. Underlying distress from past trauma can be heightened by residual alcohol withdrawal. Short term support can be followed by an offer of mental health therapy when the patient is more stable.
- Consider physical comorbidities, as alcohol and alcohol withdrawal can affect common physical conditions (eg, blood

- sugar levels in patients who have diabetes, and liver function in patients who have viral hepatitis or obesity). In addition, assistance with comorbid nicotine dependence, if present, should be offered.
- To reduce the effects of alcohol on pregnancy or breastfeeding, consider prevention of fetal alcohol spectrum disorder in health checks of young women (eg, by discussing contraception). If a pregnant or breastfeeding woman is drinking alcohol and agrees to have family involved in her care, ask her partner or family to support her to stay abstinent.

Culturally and linguistically diverse groups

Nearly one in three people living in Australia is born overseas, and one in five households speaks a language other than English.³¹ Although culturally and linguistically diverse (CALD) populations are, overall, less likely to consume alcohol than non-CALD populations, some specific communities have reported short term risky drinking practices associated with higher risk to health. There are also concerns about individual, family and community-level harms from alcohol consumption in various CALD communities.³² With risk factors arising from migration, acculturation and resettlement (such as socioeconomic marginalisation and mental health impacts), coping strategies and protective factors that enhance resilience need to be explored and supported, as these can influence individual consumption patterns.³³ Community and family wellbeing are linked to an individual's health and wellbeing, and communities have many strengths that help manage issues relating to alcohol.

For CALD patients, it is recommended that alcohol treatment services provide a worker who suits the person seeking help (eg, they may prefer to see a male or female worker, someone of the same culture and/or someone who speaks their language, or they may wish to use an interpreter). Clinicians cannot assume that CALD patients understand the concept of assessment or treatment in the same way that a mainstream service user does. For example, the Western concept of counselling does not have an equivalent in many languages, ³⁴ so clinicians should seek out the patient's understanding of treatment and work in a way that supports this. Key recommendations for working with CALD patients are summarised in Box 4.

Sexually diverse and gender diverse populations

Sexually diverse and gender diverse people report greater unhealthy alcohol use and higher rates of AUDs than the general population. This while universal screening is recommended, clinicians should note differences in gender-related patterns of use. For example, sexually diverse women are more likely to report unhealthy alcohol use and AUDs than heterosexual women. Sexually diverse young people are at greater risk of unhealthy alcohol use (heavy episodic drinking and earlier onset drinking) than heterosexual youth; unhealthy use does not decline with age among sexually diverse older adults as it does among heterosexual people. The service of the service of

Sexually diverse and gender diverse people access substance use treatment at higher rates,³⁸ but they report lower levels of satisfaction, connection and treatment completion.³⁹ Patients report feeling vulnerable, isolated and misunderstood in clinical settings.^{39,40} Identity disclosure is a risk, so patients may wait for a clinician to ask, or look for cues showing that disclosure is safe.

4 Key recommendations for clinicians working with culturally and linguistically diverse patients

- Enquire about the importance of a patient's cultural identity to them, without making assumptions; it is important to understand a patient's issues in the context of their culture.
- Use an appropriate method, such as the "teach-back" technique to
 assess the need for language and health literacy support. Teach-back
 involves asking patients to explain in their own words the instructions/
 information provided, allowing the provider opportunity to re-explain
 as necessary. This process is repeated until the patient can correctly
 recall all the information that was given.
- Where possible, integrate elements of cultural philosophy, practices and communication styles into treatment.
- Work in partnership with culturally and linguistically diverse health professionals and/or culturally specific agencies to improve treatment access and appropriateness of care.

Clinicians may hesitate to inquire because they do not know how to or do not feel confident in responding appropriately. It is critical that clinicians create safe and engaging therapeutic relationships by normalising discussions on sexuality and gender. Training can increase clinicians' confidence in working with sexually diverse and gender diverse people.

One factor that may influence alcohol misuse by sexually diverse and gender diverse people is stress responses to direct or vicarious stigma, discrimination or rejection perpetrated by family, friends, strangers and institutions. Another is the normalisation of alcohol use through alcohol-based socialising in their communities. It is important to be cognisant of patients unique experiences of managing stigmatised identities and their exposure to community-specific drinking norms. Where relevant, patients should be supported to develop alternative strategies for dealing with stigma and seek non-alcohol-based social connections. Referrals to LGBTQ-specific treatment and aftercare may be appropriate.

Older people

Population data suggest that alcohol use declines with age, especially among men, ⁴³ but drinking patterns among older adults vary. Some maintain heavy drinking throughout their adult life, while others may start drinking excessively late in life in response to age-related changes such as early cognitive impairment or negative life events. ⁴⁴ Over the past decade, alcohol consumption has been increasing in middle age. ¹⁹ Alcohol-related dementia peaks at 50–70 years of age, while cognitive changes in later life are more likely due to primary dementia accentuated by alcohol misuse. Given that drinking patterns vary, there are specific recommendations for assessing older people for harmful alcohol use. Regardless of the health care setting, screening should be undertaken for all new patients who are older than 50 years, and it should be reviewed regularly — we suggest at least annually. ⁴⁵

In particular, for older adults who present with unexplained physical or psychological symptoms, and those experiencing major life events, we recommend re-screening or assessment of alcohol and other substance use. ⁴⁵ Abstinence can be associated with marked physical, mental and cognitive improvements, whereas excessive alcohol use may mask underlying illness such as depression or early dementia. ⁴⁵ Consequently, the severity and management of concomitant physical and mental conditions should be reviewed several weeks to months after alcohol cessation.

Brief interventions should be employed for older people drinking at risky levels or experiencing alcohol-related harm (eg, falls, driving impairment or drug interactions). Withdrawal management for older alcohol-dependent patients requires close monitoring, use of nutritional supplements, careful use of sedative medication, and management of comorbid conditions. Finally, caution should be exercised when prescribing medications to older drinkers; short acting benzodiazepines (eg, oxazepam and lorazepam) are preferred for alcohol withdrawal management over long acting benzodiazepines (eg, diazepam).

Cognitive impairment

Chronic excessive alcohol use has been consistently associated with cognitive impairment, including impaired memory, decision making, problem solving and cognitive flexibility, and increased propensity for risky behaviour. Higher frequency and longer duration of drinking have also been associated with worse cognitive outcomes. The presence and severity of cognitive impairment may fluctuate with drinking levels and the presence of other comorbid factors such as acquired brain injury. Thus, where possible, it is important to determine and address the underlying causes of cognitive impairment so that treatment can be adapted accordingly.

Cognitive impairment may also make it more difficult to enact the changes required to recover from AUDs. For example, self-assessment, social cognition, emotional processing, and memory and executive function for decision making are all required to make progress.⁴⁸ Obtaining informed consent for medical treatment may also be difficult with patients who have cognitive impairment.

Cognitive screening should be incorporated into everyday practice for clinicians working with patients with AUDs, especially patients in higher risk categories such as those aged 50 years or older and those with pathological conditions of the central nervous system (eg, head injuries and epilepsy). If significant impairment is suspected, a more thorough assessment by a neuropsychologist is indicated.

Some cognitive impairment may reverse with alcohol abstinence, ⁵¹ which should be considered as part of treatment planning. If cognitive impairment is confirmed, treatment should be tailored to meet the cognitive abilities of the patient (eg, simplify instructions and provide appointment reminders) and the patient should be referred to a cognitive disorders service. Cognitive rehabilitation and cognitive training may restore and/or increase cognitive functioning in individuals with AUDs and lead to improved treatment outcomes. ⁵⁰

Conclusion

Clinicians need to be aware of key issues when screening for AUDs and treating patients who have AUDs in specific subpopulations and contexts. Some of these issues are specific to certain subpopulations, but in almost all cases there is a clear need for trauma-informed care and culturally safe practice in its broadest sense. In some contexts, such as when working with Aboriginal and Torres Strait Islander peoples and CALD peoples, providers can implement more systematic approaches to managing cultural needs in treatment. These include service collaboration, integrated approaches to care, and culturally adapted screening and assessment tools. If these systems and tools are yet to be developed, providers should be mindful of specific population needs. The evidence basis is variable, but many of these

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approaches are good practice points and are likely to improve patient outcomes and experiences.

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Chapter 5

Understanding and managing comorbidities for people with alcohol problems: polydrug use and dependence, co-occurring mental disorders, and physical comorbidities

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his chapter provides a brief overview of three chapters of the full Guidelines for the Treatment of Alcohol Problems¹
— readers are referred there for more information.

Polydrug use and dependence

Polydrug use is the most common comorbidity among people diagnosed with an alcohol use disorder (AUD).² Polydrug use is a commonly used descriptor for the increasingly recognised pattern of use of more than one substance. Typically, the substances used are interrelated; for example, a stimulant increases alertness and, at the same time, can facilitate more alcohol consumption, thereby avoiding intoxication-related excess sedation (sometimes referred to as the "switch on/switch off" effects). Importantly, polydrug use is no longer included as a diagnostic entity in the International Classification of Diseases, 11th revision (ICD-11) and the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), but is retained here because of its descriptive value. Patients with polydrug use are complex to treat, not only because of multi-substance use, but because they also experience higher levels of physical and psychosocial comorbidity, particularly anxiety, mood and conduct disorders³ (Box).

Screening and treatment plans

Polydrug use is seven times more common in people with AUD,⁴ so all patients with an AUD should be screened for other substance use with quantity–frequency estimates or structured screening instruments (such as the World Health Organization Alcohol, Smoking and Substance Involvement Screening Test [ASSIST] questionnaire⁵). Furthermore, medical and psychiatric comorbidity should be assessed and risk stratification undertaken to ascertain which substances should be considered as priority for management. To do this, the following should be obtained: (i) the patient's stated treatment goals; (ii) a mental status assessment; and (iii) physical examination. The latter two aspects require a particular focus on identification of comorbidity (treatment of mental and physical comorbidities is discussed below). When conducting any comprehensive assessment, it is opportune to undertake medication reconciliation to identify

Summary of key recommendations and levels of evidence

Polydrug use and dependence

- Active alcohol use disorder, including dependence, significantly increases the risk of overdose associated with the administration of opioid drugs. Specialist advice is recommended before treatment of people dependent on both alcohol and opioid drugs (GPP).
- Older patients requiring management of alcohol withdrawal should have their use of pharmaceutical medications reviewed, given the prevalence of polypharmacy in this age group (GPP).
- Smoking cessation can be undertaken in patients with alcohol dependence and/or polydrug use problems; some evidence suggests varenicline may help support reduction of both tobacco and alcohol consumption (Level C).

Co-occurring mental disorders

- More intensive interventions are needed for people with comorbid conditions, as this population tends to have more severe problems and carries a worse prognosis than those with single pathology (GPP).
- The Kessler Psychological Distress Scale (K10 or K6) is recommended for screening for comorbid mental disorders in people presenting for alcohol use disorders (Level A).
- People with alcohol use disorder and comorbid mental disorders should be offered treatment for both disorders; care should be taken to coordinate intervention (Level C).

Physical comorbidities

- Patients should be advised that alcohol use has no beneficial health effects. There is no clear risk-free threshold for alcohol intake. The safe dose for alcohol intake is dependent on many factors such as underlying liver disease, comorbidities, age and sex (Level A).
- In patients with alcohol use disorder, early recognition of the risk for liver cirrhosis is critical. Patients with cirrhosis should abstain from alcohol and should be offered referral to a hepatologist for liver disease management and to an addiction physician for management of alcohol use disorder (Level A).
- Alcohol abstinence reduces the risk of cancer and improves outcomes after a diagnosis of cancer (Level A).

what patient medications are deemed essential to continue, and similarly, which medications can be reduced, withdrawn or referred for other specialist advice.

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Reasons why people take multiple drugs

- To control the level and the duration of intoxication
- To enhance the desired drug effect by using drugs with similar effects (eg, alcohol and benzodiazepines)
- To compensate for tolerance to other drugs
- To reduce desired drug effect by using drugs with dissimilar effects to facilitate continued use (eg, alcohol and stimulants)
- To substitute another drug when access to another is limited
- To help recover from intoxication (eg, alcohol can mask stimulant effects)
- To further diminish emotional distress
- To avoid withdrawal or manage withdrawal symptoms

It is important to understand the pattern of alcohol and other substance use to determine which substances may be implicated in relapse to other substance use. The majority of heavy alcohol users are also smokers and alcohol use is associated with increased smoking; therefore, smoking increases the odds of AUD relapse. ^{1,6}

Alcohol use disorder and polydrug withdrawal

Withdrawal management for individuals with an AUD and polydrug use poses additional challenges because specific clinical guidelines and withdrawal scales are not available. Therapeutic approaches are highly reliant on the substances currently being consumed and the dosages. Planning and undertaking withdrawal from alcohol and polydrug dependence will usually require close monitoring and increased levels of medical and psychological support. In some situations, patients may only be ready to withdraw from one or two substances.

Nicotine

Nicotine is the most common substance used concurrently by people with an AUD. Smoking cessation support should always be provided to current smokers as part of overall withdrawal management in all settings. It is important to note that smoking significantly increases the odds of a patient's relapse to drinking and that smoking cessation is associated with better alcohol treatment outcomes. Therefore, smoking cessation should be undertaken concurrently with alcohol treatment, and there is some evidence that varenicline or topiramate may help support reduction of both tobacco and alcohol use. More detailed guidance is available in the full Guidelines for the Treatment of Alcohol Problems and smoking cessation guidelines.

Opioids and other sedative drugs

In managing patients concurrently using other sedatives (eg, benzodiazepines, opioids), treatment of alcohol withdrawal should be the first treatment priority, with other sedative use kept stabilised until the alcohol withdrawal symptoms have resolved. Longer-acting benzodiazepines are recommended in the treatment of more severe alcohol withdrawal states; for patients who are also concurrently regular benzodiazepine users, higher than usual benzodiazepine doses are required in withdrawal treatment. When providing such treatment for a patient also consuming multiple sedative drugs, alcohol withdrawal is likely to be more severe and will thus require larger benzodiazepine doses.¹² Typically, longer acting benzodiazepines, such as diazepam, are given in a sequential loading dose procedure. Following alcohol withdrawal, it is also recommended that opioid and other medication requirements are reviewed, bearing in mind that inadequate medication after withdrawal could pose risk for relapse.

Alcohol and methadone may have both pharmacodynamic and pharmacokinetic interactions. Chronic exposure to alcohol enhances methadone clearance, so that cessation of alcohol may lead to an increase in methadone levels.^{13,14} Methadone dosage should be reviewed 1–2 weeks after alcohol withdrawal. Because withdrawal for alcohol and polydrug dependence can be complex, it is recommended that consideration be given to obtaining specialist and/or inpatient treatment.

Stimulants

Stimulants usually do not require additional specific pharmacotherapy treatment, as sudden discontinuation of heavy regular stimulant use is likely to be associated with sedation. However, both alcohol and stimulants are associated with increased cardiovascular risk, so people with heavy use of alcohol and stimulants should always receive screening for cardiovascular effects. ¹⁵

Relapse prevention

Prescribing any medication to a patient engaged in polydrug use poses a risk for medication interaction. ¹⁶ There is no relapse prevention medication specific for AUD with polydrug use, but specific medication is available for alcohol, nicotine and opioid dependence. For alcohol dependence, disulfiram, naltrexone and acamprosate can be used, while in specialist practice, sometimes off-label medications like baclofen and topiramate are used with caution given the limited evidence. The risk for adverse interaction with these medications is generally low, with the exception of opioids with naltrexone (although naltrexone may be considered after cessation of opioids). ¹⁶

Continuing care

The morbidity and mortality associated with AUD and polydrug use necessitates the formulation of a care plan. The plan should include a regular review, collaboration with key supports (eg, family, partner, good friends, carer), and provide collateral information to assist with clinical monitoring.

Co-occurring mental disorders

Comorbid mental disorders are common among people with AUD, with half also experiencing an anxiety disorder and one-third an affective or mood disorder. Thus, comorbidity should be expected and planned for, and be the core focus when providing alcohol treatment.

Health services and clinicians should adopt a "no wrong door" policy. That is, the onus should not be on the patient to know the best place to seek help; rather, it is the responsibility of the clinician to coordinate care and assist the patient to receive optimal care. It is good practice to consider trauma-informed care in designing spaces, policies and procedures, to avoid unnecessarily triggering traumatic memories.

Screening and assessment

It is not recommended to require a period of abstinence before assessing or treating potential comorbid mental disorders. Differential diagnosis may assist longer term care but should not interfere with engaging the patient or immediate priorities. Assessment sets the scene for the future relationship and needs to be conducted in a compassionate and empathic manner while acknowledging that the patient may strongly believe that alcohol has postitive effects despite its profound negative effects. A standardised screening questionnaire, the Kessler Psychological

Supplement

Distress Scale (K10 or K6),¹⁸ can help identify a wide range of mental disorders in people with an AUD, and is a useful addition to routine assessments. The Alcohol Use Disorders Identification Test (AUDIT)¹⁹ is a suitable screening tool for identifying heavy alcohol consumption and AUDs among people presenting to mental health services. Further, alcohol use is associated with increased risk for suicide, and suicide risk should be assessed and regularly monitored according to established guidelines.²⁰

Providing treatment

Comorbid mental disorders and AUDs should be managed in parallel or in an integrated fashion with evidence-based treatments provided for both problems. We recommend that clinical practice guidelines are consulted for specific mental disorders, and in the absence of guidance or evidence to the contrary, these recommendations should be applied to the care of those with comorbid conditions.

Specific psychological interventions that have strong empirical support for treating mental disorders uncomplicated by comorbidity include cognitive behaviour therapy, behaviour therapy, cognitive therapy, and interpersonal therapy.²⁰ Other psychotherapies may be effective but there is generally insufficient evidence to recommend their use. E-health interventions or the provision of psychological interventions via the internet are an effective channel to deliver evidence-based psychological interventions.²¹⁻²⁵ Portals such as Beacon,²⁶ e-Mental Health in Practice,²⁷ and Head to Health²⁸ provide access. However, care should be taken to coordinate, monitor progress of, and ensure continuity of care, and to maximise engagement.

Specific medications have strong clinical trial evidence for the treatment of mental disorders uncomplicated by comorbidity. 29-32 However, people with comorbid AUDs are often excluded, so there is relatively little evidence about the safety and efficacy of many medications in comorbidity and results need to be applied with caution. Guidance on polypharmacy 33 and off-label prescribing 44 are important to consider. Side effect profiles should be considered for the exacerbation of comorbid conditions. Clinicians should also be alert to the possibility of poorer adherence to prescriptions and increased risk of overdose while intoxicated (see the national Comorbidity Guidelines 20 for additional resources).

Physical comorbidities

A comprehensive medical assessment is important in all patients with an AUD, even if the reason for consultation was not symptom driven. This reflects the fact that many medical problems arising from alcohol use may be subclinical, and may provide an opportunity to motivate patients to change their behaviour in relation to alcohol consumption. For many patients, concerns about medical complications (eg, liver tests) may be the only motivator to seek help for alcohol problems. These factors can be important in keeping patients engaged and committed to abstinence-oriented treatment programs.

Despite perceptions to the contrary, it is important to communicate clearly with patients that there are no health benefits from alcohol. ^{35,36} Generally, younger people with alcohol problems are more likely to present with an acute injury related to alcohol, while older patients are more likely to present with chronic alcohol-related complications. ³⁷ Screening for AUD using validated tools such as the AUDIT¹⁹ is recommended in hospital emergency departments and primary care when patients present with injury or illness where alcohol may be implicated as a cause. ³⁸ AUD is a disorder that affects many organ systems.

Cardiovascular disease

For patients with AUD, clinicians should have a high index of suspicion for cardiovascular diseases such as hypertension and dysrhythmia (supraventricular tachycardia and atrial fibrillation). These disorders increase stroke risk. An abstinence-focused treatment plan for alcohol is recommended for patients with cardiac disease to improve clinical outcomes. 40,41

Alcohol-related neurological disorders

Wernicke encephalopathy, cerebellar dysfunction, subdural haematoma, and alcohol-related dementia should be considered as differential diagnoses in patients with altered level of consciousness, falls, cognitive or motor decline, memory loss and ${
m AUD.}^{42}$

Alcohol abstinence, analgesia, a balanced diet, high dose thiamine and a multivitamin supplement containing other B vitamins are recommended for people with alcohol-related neuropathy who present with AUD or neurological symptoms. 43,44 People with AUD should be screened for risk of seizures and be provided with benzodiazepines to prevent seizures in the case of alcohol withdrawal. 45

Infection risk

People with AUD should receive focused education and advice about risks of unprotected sex and acquiring HIV/AIDS and other preventable sexually transmitted infections. Such interventions should be considered in others who may not meet criteria for AUD, but whose drinking behaviour (eg, binge drinking) may put them at risk of sexually transmitted infections.

Nutritional, gut and liver disease

Liver disease and cirrhosis are the most common medical complications of alcohol. 48 In patients with AUD, early recognition of liver injury and the risk for liver cirrhosis is critical. 49 Screening for alcohol-related liver cirrhosis using non-invasive methods such as ultrasonography, transient elastography and/or serological biomarkers is recommended for people with AUD. 50

Recognition of advanced liver disease and portal hypertension is recommended to ensure the safe use of pharmacotherapies used to aid alcohol abstinence. Patients with cirrhosis should abstain from alcohol⁵¹ and should be referred to a hepatologist for liver disease management and to an addiction physician for treatment. Liver transplant referral should be considered for patients with decompensated liver disease (Model for End-Stage Liver Disease score, > 14) who are abstinent from alcohol for 6 months.⁵²

Alcohol abstinence is required to prevent recurrence of acute alcohol-related pancreatitis. In acute alcohol-related pancreatitis, the use of prophylactic antibiotics is not recommended,⁵³ with management focused on observing for complications such as pancreatic necrosis, managing fluid balance, and maintaining enteral nutrition when possible.

Alcohol and cancer

Alcohol increases the risk of many solid organ cancers including aerodigestive (oropharynx, larynx, oesophagus), liver, colon, rectum and breast, and is attributed as a cause in 5.8% of all cancers. ⁵⁴ Alcohol abstinence reduces the risk of cancer and improves outcomes after a diagnosis of cancer. ⁵⁵

Conclusion

Comorbidities are common among people with AUD. This brief overview aims to assist clinicians in managing the complexities of treatment with contemporary, evidence-based information. For greater detail, readers should refer to the full Guidelines for the Treatment of Alcohol Problems.¹

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