Canadian Operational Guidance

Managed Alcohol Programs

BRITISH COLUMBIA CENTRE ON SUBSTANCE USE
Networking researchers, educators & care providers

University of Victoria | Canadian Institute for Substance Use Research

Health Canada Santé Canada

Suggested citation:

British Columbia Centre on Substance Use (BCCSU) and Canadian Institute for Substance Use Research (CISUR). Managed Alcohol Programs – Canadian Operational Guidance Document. 2023. Vancouver, B.C.: BCCSU. Available at: www.bccsu.ca/alcohol-use-disorder/managed-alcohol

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Publisher:

British Columbia Centre on Substance Use (BCCSU)

Document Purpose:

Operational guidance

Publication Date:

July 2023

Target Audience:

Policy makers, clinical and operational leads in health authorities, team leaders, funders, and organizations that provide substance use disorder care, including harm reduction and housing services and supports.

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Land Acknowledgement

The British Columbia Centre on Substance Use would like to respectfully acknowledge that the land on which we work is the unceded territory of the Coast Salish Peoples, including the territories of the xʷməθkwəyəm (Musqueam), Sḵwxwú7mesh (Squamish), and səlílwətaɬ (Tsleil-Waututh) Nations.

The Canadian Institute for Substance Use Research would like to acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory the University of Victoria stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

About the BC Centre on Substance Use

The BC Centre on Substance Use (BCCSU) is a provincially networked organization with a mandate to develop, help implement, and evaluate evidence-based approaches to substance use and addiction. The BCCSU seeks to improve the integration of best practices and care across the continuum of substance use through the collaborative development of evidence-based policies, guidelines, and standards. With the support of the Province of BC, the BCCSU aims to transform substance use policies and care by translating research into education and care guidance, thereby serving all British Columbians.

The BCCSU seeks to achieve these goals through integrated activities of its three core functions: research and evaluation, education and training, and clinical care guidance.

Research and Evaluation—Leading an innovative multidisciplinary program of research, monitoring, evaluation and quality improvement activities to guide health system improvements in the area of substance use.

Education and Training—Strengthening addiction medicine education activities across disciplines, academic institutions, and health authorities, and training the next generation of interdisciplinary leaders in addiction medicine.

Clinical Care Guidance—Developing and helping implement evidence-based clinical practice guidelines, treatment pathways, and other practice support documents.

About the Canadian Institute for Substance Use Research

University of Victoria's Canadian Institute for Substance Use Research (CISUR), formerly the Centre for Addictions Research of BC, is a network of individuals and groups dedicated to the study of substance use and addiction in support of community-wide efforts to promote health and reduce harm. Our research is used to inform a broad range of projects, reports, publications and initiatives aimed at providing all people in BC and beyond with access to happier, healthier lives, whether using substances or not. In 2021, CISUR was named the World Health Organization Collaborating Centre on Alcohol and Public Health Policy Research.

Since our inception in 2003, we have continued to gain international recognition for work based on our guiding principles of:

- Collaborative relationships
- Independent research
- Ethics, social equity and justice
- Reducing risk and increasing protection
- Harm reduction
- Informed public debate

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Acknowledgements

The Guidance Committee gratefully acknowledges Nirupa Goel, Josey Ross, and Brittany Graham for their supervisory support and editorial contributions. The committee would also like to thank the following BCCSU staff members for their contributions to this work: Trish Emerson, Averill Hanson, Kevin Hollett, Katrina Hsu, and Jordan Sang. The committee thanks Alicia Carvalho for the continuum of care image.

Production of this document has been made possible through a financial contribution from Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

In Memoriam

Ron Kuhlke, who was a member of this committee, passed away in January 2021. Ron was an incredible advocate and champion for his community. He advocated for this guidance document to be written. He contributed to many other initiatives including guidelines, education, and research projects through countless organizations. Ron was a well-known advocate in his single-room-occupancy building, where he successfully defended his neighbours against illegal eviction and played a critical role in forcing his landlord to restore the building's heat and hot water during a particularly cold winter. Ron's passing was an immense loss to the community and those who knew him and worked with him.

Myles Harps, who was a member of this committee, passed away in December 2022. Myles consistently showed up for this project, providing much needed insight and helping to shape it to accurately reflect the experiences and needs of people participating in MAPs. Myles was also a steering committee member for the Eastside Illicit Drinkers Group for Education (EIDGE) and long-time activist who fought for the rights of people who use alcohol and drugs to have access to housing and health services. He is missed deeply by this community and those who had the pleasure of working with him.

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The guidance in this document represents the view of the national guidance committee, arrived at after careful consideration of the available scientific evidence and following external expert review. The application of the guidance in this document does not override the responsibility of health care professionals to make decisions that are appropriate to the needs, preferences, and values of an individual patient, in consultation with that patient and their family members or guardian(s), and, when appropriate, external experts (e.g., specialty consultation). When exercising clinical judgment in the treatment of alcohol use disorder, Canadian health care professionals are expected to take this guidance document fully into account while upholding their duty to adhere to the fundamental principles and values of the Canadian Medical Association Code of Ethics, especially compassion, beneficence, non-maleficence, respect for persons, justice and accountability, as well as the required standards for good clinical practice as set by the provincial or territorial regulatory body their work falls under. Nothing in this guidance document should be interpreted in a way that would be inconsistent with compliance with those duties.

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Executive Summary

Alcohol use is one of the most prevalent forms of substance use and a substantial driver of morbidity, mortality, and socio-economic cost both in Canada and globally. While, the continuum of alcohol use disorder (AUD) care in Canada offers a comprehensive range of evidence-based interventions to individuals who are interested in discontinuing or reducing alcohol use, the rates of treatment engagement and retention remain alarmingly low. Available treatment interventions often do not address the needs of people with severe AUD for whom reduction or discontinuation of alcohol use are unrealistic goals. There is an urgent need for harm reduction strategies for individuals who do not find existing services in the AUD care continuum feasible, effective, or appropriate.

Additionally, many individuals, including people experiencing poverty and homelessness, face significant barriers to accessing basic care and psychosocial necessities. Notably, people with AUD who are experiencing homelessness face significant barriers to obtaining or retaining housing because access to housing services has typically been contingent on abstinence from substance use. Although individuals with severe AUD and homelessness frequently cycle through emergency departments, they rarely have sustained access to primary care or other supports. Many have had multiple unsuccessful experiences with abstinence-based AUD treatment interventions. This population is disproportionately affected by severe AUD, largely as a consequence of multiple inter-related systemic inequities—such as racism, colonialism, and stigmatization of poverty and substance use— which contribute to trauma and other psychosocial harms. In the absence of low-barrier, trauma-informed, and culturally safe services for this population, prolonged homelessness and poverty exacerbate alcohol use and alcohol-related harms, such as alcohol poisoning, severe alcohol withdrawal symptoms, liver disease, poor mental health, injuries, assaults, and cyclical hospitalization and incarceration.

To bridge the harm reduction gaps experienced by this population, a growing number of managed alcohol programs (MAPs) have been established in many communities across Canada. Managed alcohol programs are an evidence-based harm reduction intervention that incorporates managed provision of alcohol as a key component of an integrated program which includes a range of vital healthcare

and psychosocial services—such as housing, nutritional and financial support, access to medical care, and counselling— in order to ensure that safe and regulated access to alcohol does not preclude access to basic resources.

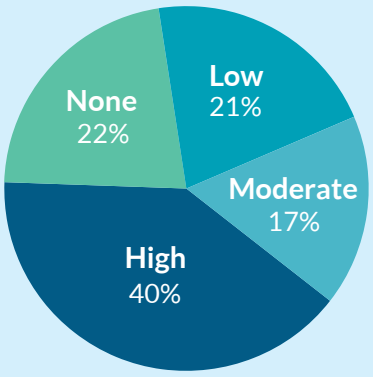
This document has been developed by a national committee of experts with the aim of providing a guiding framework for the design, implementation, and operation of MAPs. The guidance contained in this text was developed through committee consensus in direct reference to the available evidence, jurisdictional scan findings, and clinical and operational experience. The target audience for this document is policy makers, clinical and operational leads in health authorities and equivalent regional bodies, team leaders, funders, and organizations that provide substance use disorder care, including harm reduction and housing services and supports.

Aims:

- Describe the overarching principles of care for a MAP
- Describe existing models of service delivery and and provide guidance on how to select the most appropriate model for a given site
- Provide a general overview of stakeholders that may be consulted prior to implementation in order to support program development and operation
- Provide an overview of essential services and possible ancillary supports to include in the program
- Outline key space and staffing requirements
- Provide guidance on the acquisition, storage, and dispensation of beverage alcohol
- Offer operational guidance for the establishment of protocols for assessment of client eligibility, intake procedures and client orientation, individualized alcohol management plan development, and procedures for ensuring continuity of care

1 Introduction

1.1 Epidemiology of Alcohol Use, Alcohol Use Disorder, and Related Harms



Percentage of Canadians age 15 and older who do not drink and whose drinking falls into low-, moderate-, or high-risk categories[2]

Alcohol is by far the most commonly used substance in Canada.[1] According to data collected from the 2019 Canadian Alcohol and Drugs Survey, 76% of Canadians over the age of 15 consume alcohol,[1] and approximately 57% drink in excess of the low risk threshold[a] defined by Canada's Guidance on Alcohol and Health.[2] Alcohol use disorders (AUD) are also prevalent in Canada. According to Statistics Canada estimates, at least 18% of all Canadians will meet the criteria for an AUD during their lifetime, making AUD the most common substance use disorder in Canada.[3]

Alcohol use disorders and alcohol-related harms are significantly more prevalent among individuals experiencing poverty and homelessness.[4,5] It is estimated that AUD affects nearly 40% of men experiencing homelessness in high-income Western countries, including Canada.[5,6] A 2011 cross-sectional study of women experiencing homelessness in Canada (n=196), found that 38% of the sample population had an AUD.[7] The higher rates of alcohol use in these marginalized communities has been attributed to the need to cope with the toll of system-wide inequities such as systemic racism, colonialism, criminalization, and stigmatization of poverty and substance use that contribute to trauma and other harms.

a Canada's Guidance on Alcohol and Health defines a continuum of risk whereby the alcohol-related health risks for those who consume 2 standard drinks or less per week is negligible to low, moderate for those who consume 3-6 standard drinks per week, and high for those who consume more than 6 standard drinks per week, with increasingly higher levels of risk with every additional drink.

A standard drink is equal to one 341 ml (12 oz.) bottle of 5% strength beer, cider or cooler; one 142 ml (5 oz.) glass of 12% strength wine; or one 43 ml (1.5 oz.) shot of 40% strength spirits (NB: 1 Canadian standard drink = 17.05 ml or 13.45 g of ethanol).

Nearly 200 disease or injury conditions are at least partly attributable to alcohol use, with alcohol's total global burden of disease estimated to be two to three times higher than that of all illicit substances combined.[8-11] Canadian statistics indicate that alcohol use is linked to 7.7% of all deaths and 8.0% of all potential years of life lost for individuals aged 0 to 64 years.[12] Globally, alcohol was implicated in an estimated 3 million deaths (5% of all deaths) in 2016,[9] and was the leading risk factor for premature death and disability for people aged 15–49 years.[13]

Economic, health care, and social costs associated with alcohol are also substantial. In 2017, the overall annual economic cost of substance use in Canada was estimated to be over $46 billion.[14] Alcohol incurred the highest cost among examined substances in terms of lost productivity, health care, criminal justice, and other direct costs, accounting for approximately $16.63 billion or over 36% of the total substance use-related costs, followed by tobacco ($12 billion; 27%), opioids ($6 billion, 13%), and cocaine and other stimulants ($6 billion, 12%).[14]

In the 2019–2020 fiscal year, the rate of hospitalizations wholly attributable to alcohol in Canada was 258 per 100,000 people aged 10 and older, exceeding the rate of hospitalizations due to heart attacks (241 per 100,000 people aged 10 and older). Hospitalizations wholly attributable to alcohol were 4 times more common than those caused by opioids (alcohol: 240 hospitalizations per day, opioids: 55 hospitalizations per day). Provincial estimates for hospitalizations wholly attributable to alcohol varied from 159 to 1,759 per 100,000 people aged 10 and older (in New Brunswick and Northwest Territories, respectively).[15] The average cost per hospitalization wholly attributable to alcohol in Canada was estimated to be $8,100 (compared to $5,800, the cost of the average hospital stay), largely a result of the longer length of stay for alcohol-caused hospitalizations compared to the average hospitalization (11 versus 7 days).[16]

Alcohol use can also negatively affect families and communities by causing financial problems, workplace accidents, traffic collisions, and inter-personal conflicts.11 Alcohol is often implicated in incidents of violence, theft, and property crime.[17-20]

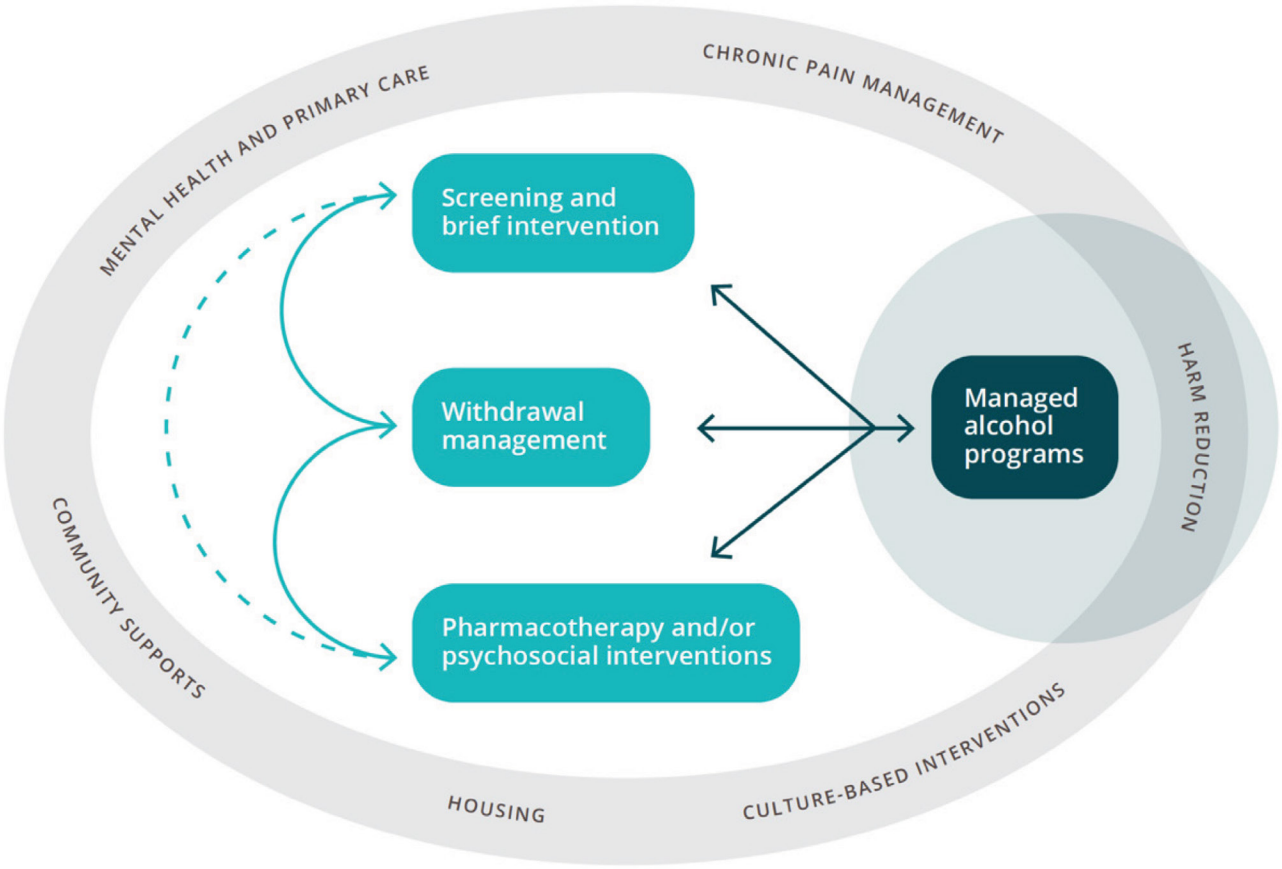
1.2 Current Continuum of AUD Care

This section provides a brief overview of the key elements of the AUD treatment pathway with reference to available guidelines, to help situate managed alcohol programs in the continuum of care. While the remainder of the present document focuses specifically on managed alcohol programs, the forthcoming *Canadian Guideline for the Clinical Management of High-Risk Drinking and Alcohol Use Disorder* developed by the Canadian Research Initiative in Substance Misuse (CRISM) provides comprehensive guidance on the identification and management of AUD, including the full range of community-based recovery-oriented supports available to this population.

The continuum of clinical AUD management consists of the following components:

1. **Screening and brief intervention**
2. **Alcohol withdrawal management**
   - Aimed at reducing withdrawal symptoms and preventing the development of severe complications of withdrawal (i.e., withdrawal seizures or delirium tremens)
3. **Ongoing pharmacological and psychosocial interventions and recovery-oriented supports**
   - Based on each individual patient's treatment needs and goals (e.g., discontinuing or reducing alcohol use)
4. **Harm reduction services and supports**
   - Includes managed alcohol programs

Figure 1. Optimized model of the continuum of AUD care



The key components of the AUD care continuum include screening and brief intervention, withdrawal management, pharmacotherapy and/or psychosocial treatment interventions, and harm reduction interventions including managed alcohol programs. As indicated by the arrows connecting these components, clients should be able to access these services in any order and move along the care continuum as needed.

The continuum of AUD care should be positioned within, and connected to, a comprehensive and holistic system of wrap-around healthcare and psychosocial supports, demonstrated by the grey ribbon surrounding the components of AUD Care. Regardless of their current type/stage of care, all clients should have access to harm reduction services and supports.

As a harm reduction program which often incorporates health and psychosocial services represented in the grey oval ribbon, MAPs are a hybrid intervention that serve as a bridge between the AUD care continuum and the network of available wraparound services in the community.

1.2.i Screening and Brief Intervention

Implementation of routine and universal alcohol screening using validated screening tools in primary care practice has increasingly been advocated for as an important public health strategy for early identification of moderate- and high-risk drinking and secondary prevention of AUD.[21-23] Individuals who screen positive for drinking above low risk should be offered brief intervention and undergo further assessment to confirm or rule out AUD based on the DSM 5 criteria. Brief intervention is a counselling approach shown to support behavioural change to reduce alcohol consumption.[24-33] However, brief intervention alone is not effective for individuals with AUD.[31] Individuals who are diagnosed with an AUD should be offered evidence-based treatment for AUD which consists of withdrawal management followed by ongoing AUD care. For guidance on screening and brief intervention, see CRISM's AUD Guideline.

1.2.ii Withdrawal Management

Withdrawal management is defined as a set of pharmacological, psychosocial, and supportive care interventions that aim to manage withdrawal symptoms that occur when an individual with a substance use disorder stops or significantly reduces the use of that substance.[34] For individuals with AUD, medically supervised withdrawal management can prevent potentially life-threatening complications of alcohol withdrawal, such as seizures, delirium tremens and death.[34] Recommended evidence-based pharmacotherapies for alcohol withdrawal management include benzodiazepines, carbamazepine, gabapentin,

and clonidine.[b] Selection of the appropriate medication and withdrawal pathway is based on each individual's risk of developing severe complications of alcohol withdrawal, which is assessed by using the validated Prediction of Alcohol Withdrawal Severity Scale (PAWSS) tool or other validated methods.[35,36] The Clinical Institute Withdrawal Assessment Alcohol revised (CIWA-Ar) tool can also be used for point-of-care assessment of withdrawal symptom severity, in order to optimize dosing and avoid over- and under-medication.[37] For guidance on managing alcohol withdrawal, see CRISM's AUD Guideline.

1.2.iii Ongoing AUD Care

The forthcoming AUD guideline recommends that all adults with moderate to severe AUD be offered naltrexone or acamprosate as first-line pharmacotherapy to support achievement of patient-identified treatment goals.[c] A substantial body of literature has demonstrated that naltrexone and acamprosate are effective in reducing return to drinking and number of drinking days.[38-41] Alternative medications for individuals who do not benefit from first-line AUD pharmacotherapies include topiramate[38,42] and gabapentin.[43-45]

The ongoing care pathway for AUD also includes a spectrum of psychosocial interventions and supports, including motivational interviewing-based counselling.[46,47] In addition, the forthcoming AUD guideline recommends providing patients with Information and referrals for specialist-led interventions (e.g., cognitive

b The superior effectiveness of benzodiazepines in the suppression of severe withdrawal symptoms and prevention of delirium tremens and seizures is supported by a substantial body of high-quality evidence. However, due to their well-documented side-effects, tendency to potentiate the effects of alcohol if used concurrently, and potential for non-medical use and dependence, their recommended use for withdrawal management is generally limited to inpatient settings where individuals at high risk of severe complications of withdrawal (i.e., PAWSS≥4) can receive close monitoring. For patients whose PAWSS score suggests they are at low risk of experiencing life-threatening withdrawal symptoms (i.e., PAWSS<4), an outpatient withdrawal management strategy is recommended using non-benzodiazepine medications such as carbamazepine, gabapentin, or clonidine, if needed. See CRISM AUD Guideline for a comprehensive review of evidence.

c Naltrexone is recommended for patients who have a treatment goal of either abstinence from or a reduction in alcohol consumption while acamprosate is recommended for patients who have a treatment goal of abstinence. See CRISM AUD Guideline for a comprehensive review of evidence.

behavioural therapy, family-based therapies), community-based recovery-oriented services, and peer-based supports (e.g., Alcoholics Anonymous [AA] and 12-step programs, Self-Management and Recovery Training [SMART Recovery]).

1.2.iv Harm Reduction Services and Supports

Although robust evidence and clinical and operational guidance exist to reduce harms associated with illicit drug use, less attention has been paid to harm reduction services for people with AUD.[48] However, a range of strategies and services have been developed in response to community needs, to reduce alcohol-related harms among individuals with AUD for whom treatment options are not feasible, effective, or desirable. Managed alcohol programs are harm reduction services designed to support individuals with AUD who are experiencing poverty or homelessness and individuals for whom abstinence-based AUD care and supports are not feasible, effective, or appropriate. A brief summary of other relevant harm reduction services and supports for this population is provided below. The services listed below are typically offered within three types of settings: drop-in day facilities, emergency shelters, and housing facilities.

Other Harm Reduction Services

Sobering centres

Sobering centres are temporary (<24 hours) accommodation facilities (e.g., emergency shelters) that provide clients experiencing acute intoxication with a safe environment and oversight by clinical staff while they recuperate from an episode of heavy drinking.[49,50] Available evidence suggests that these facilities are a safe and cost-effective alternative to jails and emergency departments for individuals experiencing acute but uncomplicated intoxication.[49,50] Additionally, sobering centres present an opportunity to discuss safer drinking strategies and provide referrals to care and support services as needed.[49,50]

Drop-in centres that allow alcohol consumption

Individuals with AUD who do not have a safe place for alcohol consumption (e.g., those who are experiencing homelessness or unstable housing circumstances) often drink in public spaces, which exposes them to increased risk of accidents, injuries, and arrests due to public intoxication and criminalization of street-based drinking.[53] Drop-in facilities that allow alcohol consumption provide a safe and non-judgemental drinking and socializing space to reduce these risks and create a sense of community while providing an opportunity to connect clients to care and support services such as housing, facilities, financial assistance, and employment services.[53,54]

Housing First facilities

Housing First is an evidence-based harm reduction-oriented permanent housing initiative developed to accommodate individuals with co-occurring substance use disorders and mental health conditions who experience chronic homelessness.[51,52] A review of these facilities is provided in The Housing First Model: Benefits and Limitations in this document. Housing First facilities allow on-site alcohol consumption but typically do not offer alcohol provision or management services.

Shelters that admit intoxicated clients or allow alcohol use on site

Individuals with AUD can face barriers to accessing and maintaining housing, as many housing facilities and related services do not allow alcohol use on site and may not admit clients with visible intoxication.[51] Temporary housing facilities that allow alcohol use on site (sometimes referred to as “wet shelters”) and facilities that admit intoxicated individuals but do not allow alcohol on site (also referred to as “damp shelters”) are designed to ensure that individuals experiencing homelessness who use alcohol are not denied access to basic determinants of health such as nutrition, accommodation, and access to health care. In addition to safe temporary accommodation and food, these low-barrier facilities often offer clients a range of services including referrals to permanent housing services, health care, and addiction counselling.[51,52]

Harm Reduction-oriented Practices

Providing education on safer drinking strategies

These include staying hydrated, choosing beverages with lower alcohol content, avoiding non-beverage alcohol (e.g., rubbing alcohol, hand sanitizer), keeping track of the number of drinks per day, and gradually increasing the time between drinks.[55]

Offering to store clients' alcohol for them while they are accessing services in a facility that does not allow alcohol on site

The prospect of entry to an abstinence-based service may cause clients to drink large amounts of alcohol and risk severe alcohol poisoning in order to avoid "wasting" their alcohol.[56,57] Reassuring clients that they will get their alcohol back may reduce this risk and help prevent the use of non-beverage alcohol to alleviate cravings after leaving the dry facility.

While the scope of this guidance document is limited to the establishment and operation of managed alcohol programs, the committee emphasizes the need for the broader implementation of other harm reduction-oriented services and practices across the continuum of AUD care.

For a comprehensive discussion of specific alcohol-related harms affecting individuals with AUD who are experiencing homelessness, see Housing Instability and the AUD Care Continuum in this document. A description of harm reduction as an overarching principle of substance use care is provided in Harm Reduction.

1.3 Gaps and Limitations in the Continuum of AUD Care

As outlined above, the current continuum of AUD care offers a comprehensive range of evidence-based pharmacological and psychosocial interventions and supports to individuals who are interested in discontinuing or reducing alcohol use; however, rates of treatment engagement and treatment success remain low.[58-60] Although Canadian statistics are lacking, according to the National

Epidemiologic Survey on Alcohol and Related Conditions-III, a cross-sectional representative survey in the United States conducted between 2012–2013, fewer than 8% of individuals with AUD had received treatment in the past 12 months.[60] Data from the United Kingdom show similarly low rates, with less than 20% of people with AUD receiving any kind of treatment.[59] Additionally, reported rates of return to drinking among individuals who receive treatment for AUD are high (50–80% within three years).[58]

In addition to known limitations to access and engagement in evidence-based care, there is a relative paucity of low-barrier harm reduction services. These services are critical for individuals with severe AUD for whom existing treatment interventions, which aim to reduce or discontinue alcohol use, have not been feasible or effective, or for those who do not wish to drastically change their alcohol consumption patterns.[5,61]

1.3.i Housing Instability and the AUD Care Continuum

As outlined above, AUD and related harms disproportionately affect individuals experiencing homelessness.[5-7] This is often a consequence of multiple and inter-related systemic inequities such as systematic racism, colonialism, criminalization and stigmatization of poverty and substance use that contribute to trauma and other harms. People who use substances and experience homelessness face significant barriers to obtaining or retaining housing because access to housing services has typically been contingent on abstinence from substance use.[62-64] In turn, prolonged homelessness and poverty have been shown to exacerbate alcohol use and alcohol-related harms, such as alcohol poisoning, liver disease, poor mental health, social marginalization, injuries from accidents and assaults, and periodic hospitalization and incarceration.[63-65] Additionally, lack of housing stability and unpredictable access to alcohol may result in risky and fluctuating drinking patterns that expose individuals to severe and potentially life-threatening alcohol withdrawal symptoms (e.g., seizures and delirium tremens, death) if alcohol becomes unaffordable or inaccessible.[66] To avoid severe alcohol withdrawal, those with limited access to beverage alcohol may engage in ”survival drinking,” which is defined as a singular focus on finding access to alcohol through any means possible, including non-beverage alcohol use (see Section Non-beverage Alcohol Use).[67]

Although individuals with severe AUD who are experiencing homelessness frequently cycle through emergency departments and hospital admissions, they rarely have sustained access to primary care or other supports.[63,64,68] Many have had multiple unsuccessful experiences with abstinence-based AUD treatment and find goals of discontinuing or reducing alcohol use unrealistic.[63,69] In some cases, untreated AUD can lead to patient-initiated hospital discharges, which may result in increased re-hospitalizations and increased morbidity/mortality.

Qualitative findings on the goals, needs, and preferences of people with AUD and chronic homelessness indicate that the vast majority of study participants have treatment goals other than achieving long-term abstinence.[70,71] They emphasize a need for programming that helps to minimize alcohol-related harms (e.g., providing beverages with lower alcohol content, education on safer drinking strategies) and meets basic psychosocial needs (e.g., shelter, nutrition, social and spiritual connections).[70,71] Accordingly, the current continuum of AUD care must expand to include effective strategies to reduce the harms of severe AUD and sustainably meet this population's basic health care and psychosocial needs, such as housing and nutrition, without requiring abstinence from alcohol use.

1.3.i.1 The Housing First Model: Benefits and Limitations

Traditionally, many housing facilities for individuals experiencing homelessness have restricted or banned substance use or required clients to enter treatment programs and achieve abstinence prior to qualifying for permanent housing.[72] This has made housing facilities inaccessible for people with severe, active substance use disorders.[72] Housing First is an evidence-based harm reduction-oriented housing initiative developed in the 1990s specifically to accommodate individuals with co-occurring substance use disorders and mental health conditions who experience chronic homelessness.[51,52] The Housing First model emphasizes clients' right to self-determination and does not impose restrictions on substance use or require participation in treatment as a prerequisite to obtaining housing.[51] In addition to providing accommodation, Housing First models seek to reduce the harms associated with substance use by facilitating stable access to harm reduction, health care, and psychosocial support services.

Available literature has associated Housing First facilities with improved housing retention and other positive outcomes including reduced drinking and

reduced use of emergency services.[51,73,74] This is attributed to improved access to health care and support services as well as a sense of stability and connection to community.[72,75] In view of these findings, Housing First models have been increasingly implemented across national and international jurisdictions over the past two decades, in order to support individuals with substance use and mental health issues who experience unstable housing.[72,75]

Broadly, Housing First models can be categorized into two models: scattered-site housing and single-site housing (or congregate housing), which is also referred to as supportive housing.[51,76] Scattered-site housing clients are offered individual housing units in a community and provided access to existing care and support services within that community so that they can engage with society as community members.[51,72,76] Single-site or supportive housing, on the other hand, typically offers clients accommodation in a standalone facility with on-site supportive services such as case management and primary medical care.[51,72,73,76]

While harm reduction is recognized as the core principle of all Housing First models, there are limitations and inconsistencies in terms of the real-world implementation of harm reduction interventions and supports. In particular, the literature pertaining to Housing First typically does not include information and guidance on providing residents with harm reduction services. In particular, while alcohol use in Housing First facilities is tolerated, the provision of harm reduction interventions for people with severe alcohol use, such as supporting consistent access to beverage alcohol, is often an overlooked component of the model.[51,72,77,78] Housing First models are increasingly characterized as a platform for delivering integrated and sustainable evidence-based interventions, such as managed alcohol, that address alcohol-related harms.

1.3.ii Non-beverage Alcohol Use

Non-beverage alcohol use refers to the use of products containing alcohol that are not intended for human ingestion (e.g., mouthwash, hand sanitizer, rubbing alcohol, aftershave, hair spray).[67,79] Due to their wide-spread availability and low cost, non-beverage alcohol products are often used as a means of avoiding alcohol withdrawal when beverage alcohol is not affordable or available.[67] Non-beverage

alcohol use is an urgent public health concern among individuals with AUD who experience poverty and homelessness, as it is associated with increased risk of morbidity and mortality due to high alcohol content and harmful additives.[80]

Most commonly consumed non-beverage alcohol products have much higher concentrations of alcohol than alcoholic beverages; for example, hand sanitizer is more than 60% ethanol, which means that 1oz would surpass the alcohol content of one standard drink.[51,79] If not diluted prior to ingestion, non-beverage alcohol products expose the consumer to acute effects of intoxication (e.g., accidents, impaired breathing, death) and higher risk of alcohol-related morbidity and mortality with continued use.[51,81]

In addition to high ethanol content, most non-beverage alcohol products contain highly toxic additives, such as methyl salicylate and thymol, which have serious harmful effects including organ damage.[51] Methyl salicylate can have a significant toxic effect on the gastrointestinal, central nervous, and hematological systems.[51,82] The ingestion of thymol has been associated with gastrointestinal disturbances, central nervous system hyperactivity, convulsions, coma, and, in acute cases, cardiac and respiratory collapse.[51,82] Despite these well-established harms, non-beverage alcohol use has not been directly addressed within the continuum of AUD care.

1.4 The Role of MAPs Within the Continuum of AUD Care

Despite the elevated risks affecting individuals with severe AUD, people who consume alcohol are frequently refused service at health centres, shelters, and community service organizations on account of intoxication or possession of alcohol.[53,63,67,79] The relative scarcity of low-barrier services for people with severe AUD further marginalizes this population and hinders their access to basic determinants of health, which may perpetuate the cycle of survival drinking and non-beverage alcohol use.[67]

Managed alcohol programs (MAPs) are a harm reduction intervention that serves as an option within the continuum of AUD care for individuals with severe AUD for whom abstinence-based treatment is not a realistic or desirable option,

particularly those who face additional barriers to basic care and psychosocial supports due to poverty and homelessness.[83,84] This harm reduction intervention incorporates managed provision of alcohol as a key component of an integrated program that often includes a range of healthcare and psychosocial services, such as housing, nutritional and financial support, access to medical care, and social and cultural supports.[83-85] Managed provision of alcohol involves dispensing individually-tailored doses of alcohol to clients at regular intervals in order to regulate alcohol intake, prevent harms typically associated with over-intoxication (e.g., falls, injuries, assault, arrests), reduce or eliminate the need for consuming non-beverage alcohol, and minimize the risk of developing severe alcohol withdrawal symptoms and other harms due to lack of access to alcohol.[83]

In principle, MAPs aim to disrupt the cycle of marginalization and survival drinking among people with severe AUD by ensuring that access to alcohol does not preclude access to basic determinants of health (e.g., accommodation, nutrition, primary care). To this end, food and accommodation are among the core services of MAPs. Managed alcohol programs are often coupled with, or offered within, housing programs or other forms of accommodation to provide a safe and inclusive alternative to abstinence-only housing for individuals with severe AUD.[84] Notably, one of the first MAPs to operate in Canada—Seaton House in Toronto—was established in the late 1990s following a public inquiry into the freezing deaths of three men who were not able to secure adequate shelter due to drinking.[86]

Managed alcohol programs also function as a key point of access to other health and social services that may be offered within the program or through outreach services.[83] In acute care settings, MAPs have also been implemented to support patients with severe AUD for whom withdrawal management or short-term abstinence during their hospital stay is not feasible.[87]

In response to the COVID-19 pandemic, many jurisdictions developed MAPs to reduce the risk of severe withdrawal symptoms and other alcohol related harms among individuals with AUD; this initiative was intended to facilitate social distancing or self-isolation during the pandemic, and to assist those who were experiencing additional barriers to accessing beverage alcohol (e.g., loss of income, business closures). To support the implementation of MAPs for this purpose in British Columbia, the British Columbia Centre on Substance Use and the Canadian

Institute for Substance Use Research developed Operational Guidance for Implementation of Managed Alcohol for Vulnerable Populations. Additionally, CRISM developed national rapid guidance documents for Supporting People Who Use Substances in Shelter Settings During the COVID-19 Pandemic and Supporting People Who Use Substances in Acute Care Settings During the COVID-19 Pandemic, both of which contain guidance on managed alcohol provision in the context of COVID-19. Quebec's Institut universitaire sur les dépendances (IUD) has also developed a clinical guidance document for Substance Replacement Therapy in the Context of the COVID-19 Pandemic in Québec, which is available in French and English and includes guidance on managed alcohol provision.

1.5 Purpose and Scope

This document is intended to provide a guiding framework for the implementation and operation of MAPs. The implementation of MAPs in Canadian communities will help bridge the harm reduction gap within the current continuum of AUD care, which affects people with untreated alcohol use disorder, particularly in marginalized populations experiencing poverty and homelessness.

This guidance document provides:

1. Overview of the evidence supporting the efficacy and safety of MAPs
2. Jurisdictional scan of programs currently operating in Canadian and international jurisdictions
3. Implementation guidance
4. Operational guidance

Implementation guidance featured in this text includes:

- An overview of potential models of service delivery and how to select the most appropriate model for a given site
- Pre-implementation stakeholder consultation
- Staffing and space considerations
- Guidance around the acquisition, storage, and dispensation of beverage alcohol

The operational guidance provided includes:

- Eligibility and intake considerations
- Considerations for individualized dosing
- Care planning
- Monitoring
- Providing relevant care and support services

The guidance contained in this text was developed through committee consensus in direct reference to the available evidence, jurisdictional scan findings, and clinical experience. See Appendix 1 for an overview of the guidance development process.

1.5.i Intended Audience

The target audience for this document is policy makers, clinical and operational leads in health authorities, team leaders, funders, and organizations that provide substance use disorder care, including harm reduction and housing services and supports.

2 Current State of Knowledge

This section provides a review of the scientific evidence evaluating the efficacy and feasibility of MAPs in a range of settings.

2.1 Evidence Supporting the Efficacy of Managed Alcohol Programs

Research on the efficacy of MAPs has been developing over the past decade. Studies published to date have found evidence of significant benefit on a number of key outcomes of interest including reduced alcohol-related health harms, reduced use of non-beverage alcohol, improved quality of life and safety, improved housing stability, and reduced burden on the health and criminal justice systems.[64,88,89]

Systematic Reviews

Three systematic reviews of MAPs have been published to date. It should be noted that two of the available systematic reviews predate much of the research conducted on MAPs; as such, the findings of single observational and qualitative studies summarised in subsequent sections of this document may be more representative of the current state of knowledge on MAPs and the robustness of available research.

In 2012, a Cochrane systematic review was conducted to assess the effectiveness of MAPs in reducing the incidence of harmful behaviour, in comparison to self-controlled alcohol use, brief intervention, and peer- or provider-led abstinence-based programs with any variation of 12-step facilitation.[90] The key indices of harm included binge drinking, substance use, violence, and non-beverage alcohol use. The authors found no controlled studies that met the criteria of inclusion and attributed the lack of evidence to the heterogeneity of outcome measures (i.e., harm reduction vs. abstinence from or reduction of alcohol use).[90] Highlighting the vital need for alcohol harm reduction programs among vulnerable urban populations, the authors called for the development of standardized outcome measures and appropriate methodologies to evaluate MAPs.

A 2015 feasibility study for the implementation of MAPs in Sydney, Australia, included a systematic review of academic and grey literature (N=14 studies) examining the effect of MAPs on alcohol consumption levels, program adherence, frequency of contact with law enforcement and emergency departments, and connection to medical care.[56] In a narrative summary of findings, the authors reported low quality evidence of reduced frequency of intoxication and reduced number of standard drinks consumed per day. Contact with the police was also reduced by 43–51%. The findings on the effectiveness of MAPs on reducing the need for emergency department visits were notable; MAPs participants demonstrated a 93% reduction in emergency service utilization while 83–89% had received non-emergency medical care during their stay in MAPs.[56] The authors concluded that, based on available literature, MAPs may represent an appropriate response to the complex health and social needs of people with AUD who are experiencing homelessness.

Although language of publication was limited to English in the article search strategy for the present literature review, consultation with experts led to the inclusion of a French-language systematic review by Montreal's *Institut universitaire sur les dépendances*, which was performed as a part of a 2020 feasibility study and implementation protocol for establishing a MAP in Montreal.[91] In a narrative account of review findings, the authors reported that MAP participation was associated with a reduction of non-beverage alcohol use and a marginal decrease in total alcohol consumption. The reviewed literature also associated MAPs with significant reduction in police encounters, emergency service utilization, and alcohol-related hospitalization time. The review also found improvements in housing stability and psychosocial well-being.[91]

Finally, a 2022 scoping review (N=32 studies) used a systematic search methodology to review academic and grey literature examining the efficacy of MAPs.[92] The key objectives of this review were to identify measured impacts of MAPs, and to identify gaps in the evidence which merit further research. The authors found that, while MAPs were an emerging area of research, available literature offered a promising evaluation of the effectiveness of MAPs in improving health and psychosocial outcomes for individual with severe AUD who are experiencing homelessness. In the category of measurable outcomes resulting from MAP participation, the included studies demonstrated significant

improvement in early alcohol-related outcomes (e.g., early decrease in overall alcohol consumption, NBA consumption, seizures, assault, injury), general health outcomes, housing retention, and quality of life measures among participants with severe AUD. In the category of reported client experiences, MAP participants in included qualitative studies reported an improved sense of personal safety, control over alcohol use patterns and behaviours, and belonging to a community, as well as reduced feelings of shame and guilt, attributed to the non-stigmatizing MAP environment. While the review yielded promising results for outcomes during MAP participation, the authors called for further research evaluating long-term outcomes and program implementation considerations.[92]

Observational Studies

With the exception of an initial proof of principle study published in 2006, observational research published to date on community-based MAPs is almost exclusively Canadian and conducted within the Canadian Managed Alcohol Programs Study (CMAPS). This work primarily focused on community MAPs offered in housing-based[d] settings, such as shelters or supportive housing facilities, which provide a more inclusive alternative to abstinence-only housing for individuals with severe AUD who experience housing instability.[2]

The initial proof of principle study (2006) of managed alcohol provision was a pre-post analysis observational study (n=17) set in an Ottawa shelter examining the impact of managed alcohol administration on alcohol consumption, emergency department visits, and encounters with the police.[93] Participants of the MAP were enrolled in the program for an average of 16 months, with a range of 5–24 months. The results showed that the number of police encounters during MAP enrollment fell by 51% (p=0.018) and monthly mean total of emergency department visits fell by 40% (p=0.004), compared to data collected from the records of the same participants for the 3 years prior to enrolling in the MAP. While blood test results did not show a significant change in blood alcohol levels, all participants reported

d The term "housing-based" program or facility is used in this document to refer to services such as shelters and short- and long-term supportive housing where clients are provided with accommodation as well as other health and social services such as managed alcohol provision.

reduced alcohol use while enrolled in the MAP, and participants and staff reported improved hygiene, nutrition, and engagement in care.[93] This study did not have a control group.

In 2013, a mixed methods small-scale pilot study (n=7) evaluated a MAP in a Vancouver supportive housing facility using pre-post analysis. The outcomes of interest included housing stability, access to and use of health care services, social functioning, patterns of alcohol use, alcohol-related harms, and changes in health status.[88] All of the participants remained housed during the course of the evaluation and reported high housing satisfaction at every data collection point. The findings also demonstrated a reduction in the frequency and volume of non-beverage alcohol use. Participants and staff also reported reductions in several alcohol-related harms (e.g., social functioning problems, financial issues, withdrawal seizures) and improvements in mental health measures. Additionally, staff and participants reported improved access to health and psychosocial services and supports as well as improved social connections. Based on these findings, the authors concluded that the program met its harm reduction goals of providing clients with sustainable housing and reducing non-beverage alcohol use and related harms. However, the authors noted that there was no reduction in the total amount of alcohol consumed and the number of participants meeting the criteria for liver damage increased, which could potentially be attributed to drinking outside the program.[88] While emphasising the program's ability to meet its key objectives, the authors called for larger scale research to further characterize the benefits and risks of MAP participation and to consider program design elements that would minimize the risk of alcohol consumption outside the program.[88]

A 2016 controlled longitudinal mixed-methods study of a MAP within a housing facility in Ontario (n=38; 18 MAP and 20 control participants) evaluated the impact of managed alcohol on patterns of alcohol consumption and related outcomes including alcohol-related health harms, housing stability, encounters with the police, and connection with health care services among people experiencing homelessness.[94] The control group consisted of demographically comparable individuals from an emergency shelter who met the criteria for alcohol dependence and could meet the criteria for MAP enrollment. Compared to controls, MAPs participants had 43% fewer contacts with the police ($p<0.01$), 70% fewer admissions to detoxification programs ($p<0.02$), 47% fewer emergency

room visits, and fewer days of non-beverage alcohol consumption (mean 4.3 days vs. 12.4 days, $p<0.05$). The frequency of non-beverage alcohol use was significantly lower for MAP participants compared to controls ($t=-2.34$, $P<0.05$). Additionally, marked but non-significant reductions were observed in the number of participants self-reporting alcohol-related harms in the domains of home life, legal issues, and withdrawal seizures. The authors also compared the same outcomes for the periods on/off managed alcohol among 13 of the MAPs participants, using police and health records from 5 years prior to enrollment in the MAP to 12 months post-enrollment. In comparison with periods where MAP was not utilized, MAP participants had 41% fewer encounters with the police ($p<0.03$), 87% fewer detoxification program admissions ($p=0.06$), and 32% fewer hospital admissions ($p=0.03$). Improvements in liver function were also observed in nearly all of the 13 cases where comparable liver function test records were available for pre- and post-MAP participation periods.[94] A further analysis of the same study demonstrated that, in comparison to controls, MAP participants were significantly more likely to retain their housing; 13 (72%) of the MAP participants retained their housing while all the controls continued to experience homelessness during the study period.[69]

A 2018 controlled observational study assessed alcohol consumption of participants (n=175) from six housing-based MAPs in five cities across Canada (Vancouver, Thunder Bay, Toronto, Ottawa, and Hamilton) compared with a control group matched for age, sex, and ethnicity (n=189).[95] Results showed that participants who had been MAP clients for longer than two months had significantly fewer standard drinks per day (15.1 drinks) than newer MAP participants (20.2) and controls (22.2).[95] Long-term MAPs participants also reported consuming non-beverage alcohol on fewer days than controls (adjusted mean: 1.51 vs. 3.79, $p<0.05$). Long-term MAP clients were also significantly less likely to report alcohol-related harms (e.g., physical health issues, involvement in illegal activities, social problems) over the past 30 days than newer MAP participants and controls.[95]

Another 2018 analysis of the same study (175 MAP clients and 189 controls) investigated strategies used by participants to cope with instances when beverage alcohol was unaffordable.[66] The authors found that MAP participants who had been enrolled in the program for more than two months were less likely than

controls to resort to potentially harmful coping strategies.[66] Specifically, MAPs participants were significantly less likely to use illicit drugs including non-beverage alcohol [odds ratio (OR) 0.50, p=0.02], steal from liquor stores (OR 0.50, p=0.04), re-budget their financial resources to purchase alcohol (OR 0.36, p<0.001), or steal property (OR 0.40, p=0.07). Long-term MAP participants were also more likely to seek treatment (OR 1.91, p=0.03) and less likely to go without alcohol and experience complications of withdrawal (OR 0.47, p=0.01).[66]

A 2021 multi-site quasi-experimental longitudinal study (n=175) investigated the long-term (12-month) alcohol use trends and related health harms of 59 MAP participants in comparison to 116 local controls who were not receiving treatment for AUD and would have met MAP entry criteria.[96] While both groups exhibited similar reductions in total consumption of beverage and non-beverage alcohol, MAP participants consumed their alcohol in a more even and measured pattern, with their total alcohol consumption spread out over a longer period of time (25.41 versus 19.64 days per month). Managed alcohol participants also reported significantly fewer harms at both 2- and 6-month follow-ups, with no significant difference in harms observed between the two groups at 12 months. Furthermore, liver function test results demonstrated that MAP attendance was not associated with worsening liver functioning, whereas leaving the MAP was associated with deterioration of hepatic function compared to the period of MAP participation. While affirming the findings of previous CMAPS studies summarized above, this article provides the most robust evidence to date suggesting that MAP participation can promote a safer and more stable pattern of alcohol consumption compared to controls, with no negative impact on liver function or other alcohol-related health harms.

A 2021 retrospective controlled cohort study (n=333) assessed the health outcomes of 205 MAPs participants recruited from seven MAPs across five Canadian cities in comparison to 128 local controls who were not enrolled in a MAP but met the MAP entry criteria.[97] The outcomes of interest included risks of emergency room utilization, hospitalization, and death. To assess these risks, the authors retrieved participants' records of mortality, emergency room visits, and hospitalization over a 12-year period (2006–2017), and created statistical models based on this data. The findings demonstrated that MAP participants spent significantly less time in hospital than control participants (12.78 vs 20.08

days per year, P=0.0001).[97] There were no other significant differences observed between MAP participants and controls. The authors also compared all the outcomes of interest for the pre-MAP, on-MAP, and off-MAP periods within the MAP arm of the study; in comparison to periods spent outside MAP, participation in MAP was associated with significantly reduced risk of mortality (hazard ratio [HR]=0.37, P=0.0001) and emergency room visits (HR=0.74, P=0.0002) as well as fewer days hospitalized per year (10.40 vs 20.08, P=0.0184).[97] The authors concluded that MAPs were a promising approach to reduce mortality risk and time spent in hospital for people with an AUD and experiencing homelessness.

Qualitative Findings

A 2015 CMAPS qualitative study involving interviews and follow-up focus groups with 10 clients in an Ontario MAP sought to identify specific aspects of the program that helped form an "enabling place," which the authors defined as a network or environment that affords the individuals the key resources for improving their well-being.[98] The analysis of interview findings suggested that the environment of the MAP enabled togetherness, awareness, and self-management among the participants. The sense of togetherness was fostered through supportive interactions with staff and fellow participants, while routine access to medical consultation (e.g., discussion of liver function test results) and the opportunity to observe other clients' health struggles generated an awareness of vulnerability and the specific health risks of alcohol use. Additionally, participants reported that the collaboratively managed daily supply of alcohol gave them a sense of choice and the ability to self-manage consumption without the stress of obtaining alcohol. This sense of control had enabled all respondents to take periodic breaks from drinking or to reduce alcohol consumption (e.g., switch some doses with non-alcoholic alternatives made available by the program). The authors concluded that, in addition to a space for alcohol harm reduction, MAPs function as enabling places for personal recovery where supportive relationships, improved awareness of health, and self-discipline can empower individuals to sustainably improve their health and well-being. The authors also highlighted the role of tangible program elements, such as offering routine liver function testing and making non-alcoholic beverages (e.g., non-alcoholic beer) available, as important facilitators of recovery in the program.[98]

The qualitative component of a 2016 longitudinal mixed-methods study of a MAP within a housing facility in Ontario (n=38) included in-depth interviews with 7 MAP participants and 4 staff members.[69,94] The interviews were focused on participants' experience of the MAP and the perceived impact of the program on their quality of life. Clients consistently characterised MAPs as a safe refuge from the street. In contrast to the street, where their lives were monopolized by the daily struggle to survive, participants described MAPs as a home-like environment where they could build and rely on respectful and trusting relationships that supported their healing.[69] Prior to enrolling in the MAP, participants had rotated through a range of temporary settings such as hospitals, jails, and shelters, where they encountered stigma and judgement.[94] The interviews suggested that, in addition to providing a welcoming and non-stigmatizing alternative to these settings, the MAP had reduced the need for activities that could lead to police encounters (e.g., theft or sleeping in abandoned vehicles).[94] Additionally, regular access to health care through the MAP had reduced the need to utilize emergency care services.[94] In aggregate, the qualitative findings suggest that the MAP served as a safe and supportive space where clients could find the stability, hope, and confidence to begin healing and reconnect with family and cultural practices.[69,94]

A 2019 CMAPS qualitative study of six MAPs across five Canadian cities, involving 57 MAP participants and 50 staff members, examined the role of MAPs in reducing harms associated with substance use and homelessness.[63] Through individual semi-structured interviews, participants characterized life prior to entering MAP as an unsettling process of perpetual displacement and cycling through multiple settings or environments (i.e., street life, health services, justice system, housing and shelters), where abstinence from alcohol was a prerequisite for receiving adequate health care or social assistance. This instability resulted in minimal and sporadic access to care and social services and the loss of familial and social connections. Participants reported that MAPs disrupted this cycle by ensuring that housing stability and adequate health care and supports were not contingent on abstinence.[63] Findings suggested that, in addition to mitigating alcohol-related risks and facilitating access to basic health care and nutrition, MAPs offered clients a safe and stable space where they could restore their social and cultural connections and begin to heal. Highlighting the importance of connection to cultural identity in this healing process, the authors also called for the implementation of Indigenous-led MAPs and the expansion of access to Indigenous cultural practices within existing MAPs.[63]

The impact of peer-run MAPs operating as day programs (i.e., not including overnight accommodation) was explored for the first time in a 2021 qualitative study involving in-depth interviews with 14 clients of a day/outreach MAP serving community members experiencing homelessness or unstable housing.[67] Participants emphasised the central role of the program in providing an alternative to street-based survival drinking patterns, including non-beverage alcohol use, which had been a large part of the participants' daily drinking routines prior to joining the MAP. In addition to offering low-cost or free beverage alcohol options and a lounge space for clients to gather and drink safely, the program provided daily employment opportunities (e.g., working at the brew co-operative and delivering non-alcoholic beverages to community members to support regular hydration). This fostered a sense of service and further distanced clients from harmful survival drinking patterns. All participants reported having drastically reduced or discontinued non-beverage alcohol use due to steady access to beverage alcohol through the program. A number of participants reported that the program had eliminated the necessity for stealing or shoplifting to access alcohol. Participants' accounts suggested that time and energy previously devoted to survival drinking activities were now diverted to restoring community connections and self-care. Based on these findings, the authors concluded that community-based, peer-run, non-residential MAPs have the potential to meet the health and social needs of marginalized community members with severe AUD and should be considered in plans to implement and expand harm reduction interventions for this population.[67]

Evidence on Cost-effectiveness of MAPs

In reference to studies finding a significant reduction in the utilization of emergency departments and law enforcement among MAP clients, an in-depth financial cost-benefit analysis of the housing-based MAP in Thunder Bay, Ontario, was conducted in 2016.[99] The authors compared the net annual costs of the average MAP user to health and social services (i.e., MAP participation, emergency shelters, detoxification services, inpatient care, emergency department) to those of control groups and MAP participants prior to enrolling in MAPs. The total service cost incurred by the average MAP participant was estimated at $42,685 (including $29,306 attributed to per-client operational MAP costs) while the total costs incurred by the control group came to $48,969.[99] This

analysis showed that the annual societal costs of the average MAP participant is $6,284 lower compared to the control group. The authors estimated that there was a savings of between $1.09 and $1.21 for every dollar invested in a MAP, due to the significant reduction in the utilization of health, social, and legal services by MAP participants.[99]

Evidence on Hospital-based Managed Alcohol Programs

The hospital-based inpatient provision of alcohol to prevent and manage severe alcohol withdrawal is supported by a relatively small body of evidence. A 2018 review of 28 articles (n=688 participants), including 9 randomized and non-randomized controlled trials, found the provision of alcohol to be safe and non-inferior to standard withdrawal management protocols (e.g., treatment with benzodiazepines) for preventing or treating alcohol withdrawal symptoms among hospitalized patients with severe AUD.[100] While calling for more robust research and guidelines to inform the implementation of hospital-based MAPs, the authors concluded that available literature supports the efficacy of this intervention for preventing severe withdrawal symptoms, stabilizing drinking patterns, encouraging patients to stay in hospital until their inpatient treatment is completed, and connecting them to other health and social supports.[100]

Emerging Evidence on Cannabis Substitution in MAPs

A 2021 pre-implementation mixed methods study involving 6 MAPs (n=43 [19 MAP clients and 24 program staff and organizational leaders]) assessed the feasibility of, and need for, offering MAP clients cannabis as substitution for alcohol to reduce the impact of long-term heavy alcohol use.[101] The premise of this study was informed by existing observational evidence suggesting that cannabis may be beneficial in reducing alcohol withdrawal and craving (which may lead to reduced alcohol consumption) and other concerns, such as pain, anxiety, and sleep issues.[102-106] Data collected through structured surveys and interviews demonstrated that 63% of participating MAP clients were already periodically using cannabis to manage alcohol cravings (n=15, 78.9%,) and withdrawal (n=10, 52.6%).[101] The majority of MAP participants (n = 16, 84.2%) expressed interest in receiving cannabis substitution as part of the program. Similarly, 6 of 7 interviewed organizational leaders were supportive of implementing a cannabis

substitution pilot program. The potential challenges identified through staff and organizational leader interviews were generally logistic, and included lack of access to a sustainable cannabis supply, uncertainty about approval requirements, and the need for additional education and support for staff and clients. In addition to assessing interest and need, the study also presented participants' views on the characteristics of a feasible and preferable cannabis substitution service; MAP participants and staff expressed a preference for a partial substitution model whereby staff dispense cannabis to replace a portion of alcohol doses according to the client's preference.[101] Highlighting the existing prevalence of cannabis use by MAP clients and the significant support for the inclusion of cannabis substitution in managed alcohol programming, the authors recommended the allocation of funding as well as education, training, and counselling supports for the implementation of cannabis substitution.[101]

2.2 Jurisdictional Scan

This section provides a brief overview of the characteristics of MAPs operating in Canadian and international jurisdictions.

2.2.i Managed Alcohol Programs in Canada

As of publication, there are at least 42 known MAPs operating in eight Canadian provinces and territories (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, and Northwest Territories). A descriptive list of these services is available at the CMAPS website. This section provides a summary of the key characteristics of Canadian MAPs, including setting, eligibility criteria, managed alcohol dispensing and administration plans, staffing,

funding sources, scope of additional services.[e] These key service elements are defined in reference to a 2018 comprehensive analysis of 13 Canadian MAPs, which identified 6 key implementation dimensions: program goals and eligibility criteria, food and accommodation, alcohol dispensing and administration, funding and financial management, care services and clinical monitoring, and social and cultural connections.[64]

e This jurisdictional scan is largely drawn from CMAPS' regularly updated Overview of MAP sites in Canada and a 2019 jurisdictional scan conducted as a part of McMaster University's Rapid Synthesis: Determining the Features of Managed Alcohol Programs. Where available, additional and updated information has been included in reference to the literature.

It should be noted that there may be housing facilities and other community-based services across Canada using the principles of managed alcohol provision to minimize alcohol-related harms among clients with AUD without being formally recognized as a MAP.[89] Additionally, as a part of the response to the COVID-19 pandemic, a number of community-based organizations serving vulnerable populations have developed managed alcohol provision protocols to prevent the harms of unmanaged alcohol withdrawal among individuals with AUD who have difficulty accessing alcohol due to physical distancing directives.[107] This jurisdictional scan does not include all of these emerging services.

Setting

Permanent and transitional supportive housing facilities are the most common settings for MAPs across Canada. Other community-based settings include shelters, drop-in centres, and community outreach programs.[108]

Some community outreach programs offer alcohol delivery as well as drop-in alcohol dispensation (e.g., Phoenix Residential Society, Regina; Community Managed Alcohol Programs, Vancouver).[107,108] There are also 2 hospital-based inpatient programs, one at Vancouver's St. Paul's Hospital109 and one at Edmonton's Royal Alexandra Hospital.[108]

Eligibility Criteria

In almost all cases where MAP eligibility criteria are explicitly outlined, severe AUD is listed as the primary eligibility criterion.[108,110] One exception is Lighthouse Supported Living in Saskatoon, which provides managed alcohol to clients with a history of heavy drinking who are assessed to be at risk of alcohol withdrawal and alcohol-related harms.[111] A number of supportive housing facilities list complex substance use disorders and mental health care needs as their criteria for living in the facility, but do not list specific eligibility criteria for receiving managed alcohol. Other common alcohol-related criteria include a history of non-beverage alcohol use, history of public intoxication, homelessness in the case of programs that offer accommodation, and frequent utilization of public resources such as the emergency department due to alcohol-related problems.[112-114]

Many of the reviewed programs exclusively serve clients experiencing homelessness or unstable housing circumstances. One program, Annex Harm Reduction Program in Toronto,[115] serves those who are currently waiting for harm reduction-oriented supportive housing programs due to alcohol use and complex care needs.

Many programs serve specific populations. For example, this jurisdictional scan found 4 supportive housing programs serving seniors (55 years or older),[111,116-118] 3 programs tailored to Indigenous clients,[111,116,119] and 5 programs for men only,[111,115,116,120,121] and 3 outreach programs serving individuals quarantining due to the COVID-19 pandemic.

Funding

Most MAPs are predominantly funded by regional health authorities.[108] Municipal governments have also contributed to the funding of local MAPs in a number of jurisdictions.[115,116] The federal and provincial governments also contribute to a number of MAPs through grants.[48,122]

Procuring funding for the total cost of alcohol is often challenging.[108,123] In many facilities, clients contribute significantly to procurement of alcohol by a range of means including signing over a portion of monthly social assistance or disability benefits to the program, contributing to the functioning of brewing co-operatives that supply the alcohol for the program, or simply purchasing their alcohol from the program at low cost.[67,108,123] In addition to client contributions, most programs rely on a combination of funding sources that include support from local organizations, community fundraising, and local alcohol suppliers.[123]

Alcohol Provision Plan

Regardless of the model of service employed, most MAPs have an initial assessment procedure in place for the purpose of tailoring alcohol dosage to each client's individual needs based on a range of factors including their alcohol consumption patterns, their risk of developing severe withdrawal symptoms, and their drinking goals.[64,123] In one Edmonton-based, low-barrier, supportive housing facility, clients are able to self-determine what amount of alcohol to consume;

they also have the option of receiving a dosage prescription, based on clinician assessment and collaborative discussion, to support them in regulating their alcohol consumption patterns.[112]

Tailored alcohol dosage and dispensing schedules occurs in varying degrees across different MAP models. Many housing-based facilities have fixed dispensation intervals, up to 11–12 drinks per day.[108] For example, in the Kwae Kii Win supportive housing facility located in Thunder Bay, Ontario, drinks are dispensed at 90-minute intervals between 8am and 11pm.[96] Other MAPs develop individualized dispensing schedules based on a collaborative assessment with the client (e.g., Community Alcohol Management, Vancouver[67]), while in clinician-led models, alcohol dispensation is scheduled based on the client's care plan.[64,108]

Programs often have protocols to assess intoxication prior to dispensing a dose, and clients who are overly intoxicated may be refused a dose or provided reduced amounts.[64,124] Recognizing the risk of alcohol use outside of MAPs, these protocols aim to prevent increased total alcohol consumption and related harms (e.g., falls, injuries, violence and arrests related to public intoxication).[64,125]

Based on available information, wine and beer are the most commonly dispensed types of alcohol. One hospital-based program dispenses client-specific doses of vodka.[108] In some programs where clients purchase their own alcohol, other types of alcohol (e.g., various spirits) can be provided through a "special request." A few programs (e.g., Special Care Unit, Hamilton) also permit clients to purchase and bring in their beverage of choice in unopened bottles which, in some cases, may be collected by MAP staff for scheduled drink dispensation.

Initiation and Delivery of the Managed Alcohol Provision Plan

Most included MAPs did not specify who performs the initial admission and dosing assessments. Most programs that did provide this information reported that managed alcohol plans are developed by on-site clinicians (commonly a nurse practitioner or registered nurse with appropriate training) who also provide oversight, while non-clinical staff dispense alcohol doses.[64] In many programs, initial assessment and medical care plans are reviewed by a physician. However, there are a number of MAPs where candidate assessment and MAP

initiation are conducted by other staff, such as case managers or trained facility staff members.[111,115]

Clinicians involved in MAPs include family physicians, nurse practitioners, nurses, psychologists, psychiatrists, and dieticians.[108,124] Non-clinical staff typically include social workers/case managers, personal care workers, health care aids, peer workers, trained harm reduction support staff, and Indigenous Elders. [108,119]

General Scope of Services

Almost all community-based programs offer additional health and psychosocial services aside from the managed provision of alcohol.[108] In keeping with their central mandate of ensuring access to basic determinants of health, provision of food and accommodation are among the core elements of MAPs;[64] the vast majority of MAPs in Canada are operating within shelters or housing facilities or where residents receive meals and can access basic care and support services.[64,108] Managed alcohol services that operate as day programs, which do not include on-site accommodation, commonly have referral pathways to shelters and housing services, and offer clients food and meal preparation facilities as well as access to accommodation services.[108] Day programs may also develop plans and/or vouchers for safe transportation between the MAP site and clients' housing services.

The extent of clinical care provision within MAPs depends on the model of care and the specific needs of the client populations served. The most common health service included is comprehensive primary care provided on site or through community outreach.[123] Housing-based facilities that serve aging clients or those with complex health and mobility needs offer more comprehensive wrap-around care including on-site psychologist/psychiatrists, occupational therapists, and dietitians.[117,126]

Other services provided include life skills training, financial management, addiction counselling, help with applying for provincial health benefits and other social services, employment opportunities, cultural and social activities, and harm reduction education and training.[48,112,113,122,126]

2.2.ii Managed Alcohol Programs Outside Canada

There are published needs assessments and feasibility studies of MAPs for several international jurisdictions, including Australia[127] and the United Kingdom.[128] This jurisdictional scan found published information on MAPs currently operating in the United States and Ireland.[f] As mentioned above, managed alcohol provision services often operate informally to meet the needs of clients without being identified as a MAP; thus, this jurisdictional scan of publications does not reflect the growing number of MAPs operating in various international jurisdictions.

MAPs in United States

This jurisdictional scan found published information on two MAPs operating in the United States.

A 2016 article published on the website of Substance Abuse and Mental Health Services Administration (SAMHSA) reported on a Seattle-based supportive housing facility which provides alcohol management services to clients with AUD.[129] This is a community-led model of MAP where trained supportive housing staff assess clients' alcohol use patterns and risk of withdrawal through a questionnaire and agree on individualized dosage of alcohol to be provided by staff at certain intervals. Program funds are not used to purchase alcohol; clients and suppliers agree to contribute the funds for purchasing alcohol.[129]

In response to the COVID-19 pandemic, California's Project Roomkey provides quarantine shelter to people experiencing homelessness with suspected or confirmed COVID-19. This project currently operates MAPs out of eight Project Roomkey locations in Alameda and San Francisco Counties.[130] Clients are referred to Project Roomkey facilities from a range of sources such as emergency departments, urgent care clinics, primary care providers, and shelters.

Project Roomkey MAPs operate based on a clinician-led model of service whereby intake and comprehensive assessment of care needs and alcohol use patterns are

f Portugal and Australia have also announced plans for forthcoming MAPs in Lisbon and Sydney, respectively.

conducted by a nurse who recommends a fixed alcohol dose to be provided to the client at set intervals. While alcohol doses are provided by trained staff members, the nurse is tasked with overseeing the program and connecting the client with appropriate medical care. Additionally, all clients are assigned an interim case manager during their Project Roomkey stay; the case manager assesses eligibility for various services and completes referrals as appropriate. An evaluation of this pilot program is currently in progress at the University of California's San Francisco Center for Vulnerable Populations.[130]

Sundial House, Dublin, Ireland

Established in 2008, Sundial House is a long-term supportive housing facility that accommodates 30 adults experiencing homelessness, AUD, and complex health needs.[131] The facility is staffed by house managers, a daytime on-site nurse, case managers, health support workers, 24-hour reception staff, chefs, and housekeeping staff. In addition to permanent communal housing, daily meals, and alcohol management, Sundial House offers clients a range of health and social services including comprehensive case management that includes coordinating on-site and off-site medical visits, personal care support, budgeting support, and arranging recreational and cultural activities with the support of volunteers.[131] Alcohol management is provided by case managers or health support workers in consultation with the nurse and involves negotiating daily alcohol intake, budgeting with the clients, and assisting with purchasing, storing, and dispensing alcohol doses as needed. Clients cover the cost of alcohol, and those who are able take responsibility for shopping for alcohol and regulating their own alcohol use in accordance with house rules and management plans are allowed to do so.[131] This program is the first of its kind in Ireland and an early example of managed alcohol programming internationally.[131]

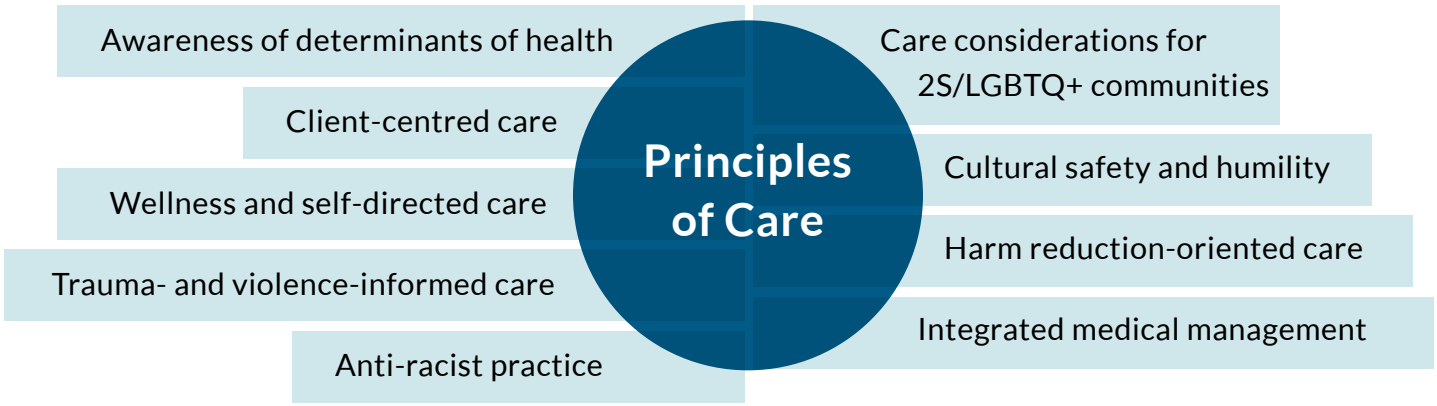
Table 1. Summary of Jurisdictional Scan: MAPs in Canada and international jurisdictions (based on published information)

Region	Setting	Management/ Supervision	Commonly Specified Client Characteristics	Special Populations Served	Common Funding Sources	Commonly Specified Additional Services
MAPs in Canada						
• British Columbia • Alberta • Saskatchewan • Manitoba • Ontario • Quebec • Nova Scotia • Northwest Territories	• Transitional or permanent supportive housing • Shelter • Day/ outreach program • Hospital-based	• Clinician-led • Non-clinician staff-led • Peer-led	• Severe AUD • Experiencing homelessness • Non-beverage alcohol use • Complex addiction and other health needs • Not eligible for other housing program due to severe AUD	• Indigenous • Seniors • Men only	• Regional health authorities • Municipal government • Federal and provincial • Non-profit organizations • Clients/ members • Combination	• Primary care • Access to medical services • Case management • Meals • Counselling • Financial management • Social and cultural activities • Skills training • Employment opportunities
MAPs Outside Canada						
• Washington, US • California, US • Dublin, Ireland	• Supportive Housing • Hotel-based quarantine facility	• Community-led • Clinician-led	• Severe AUD • Experiencing homelessness • At risk of COVID-19	• General population • COVID-19 quarantined	• Not specified	• Access to medical care • Case management • Meals

This table provides a brief summary of key characteristics of MAPs currently operating in Canadian and international jurisdictions. A comprehensive and periodically updated list of existing MAPs in Canada is provided in the CMAPS website. The inventory of current Canadian MAPs offered in this website provides an overview of the key features of each program, including the number of participants, setting, alcohol administration policies, funding type, and contact information.

3 Principles of Care

Any service seeking to reduce harms associated with alcohol use should be grounded in principles of care that foster respectful, collaborative, inclusive, equitable, and ultimately effective therapeutic relationships with clients. These principles should guide the practices of all MAPs staff including including case managers, health support staff, social workers, clinicians, and peers.



These principles have been shown to improve access to, and retention in, care and harm reduction services by enabling service providers to understand and support the health care needs and recovery goals of each client. Regardless of the models of care employed, it is recommended that these principles be incorporated in MAPs.

3.1 Awareness of Determinants of Health

Service providers should view and address substance use disorders within the broader context of the determinants of health. Determinants of health are defined as "the economic and social conditions that shape the health of individuals, communities, and jurisdictions as a whole."[132] The distribution of resources and opportunities that a society makes available to its members (e.g., food, income, housing, education, health care, social and cultural support) is affected by a range of factors including socioeconomic class; sex and gender identity; sexuality; race and ethnicity; refugee, migrant, or immigrant status; and disability status.[133,134134]

The intersection of multiple systemic and social factors (e.g., gender, race, and sexuality) informs each individual's social identity and access to resources and, in turn, health outcomes.[135] People who belong to groups that experience marginalization also face the most significant barriers to accessing resources, and, as a result, have the poorest health outcomes.[133]

Cited determinants of high-risk drinking and AUD include lower socioeconomic status[136] and being a member of a community marginalized on the basis of race, ethnicity, gender, or sexuality.[137] Lack of awareness of these socioeconomic factors may lead to further marginalization of people who use alcohol and impede access to adequate care.

Service providers should aim to address inequities that may exist in the determinants of health by offering to connect clients to resources that help meet their social and survival needs (e.g., safe housing, food/nutrition, childcare, financial assistance, support for social connection and community participation). This is the core imperative informing the development of MAPs as a harm reduction intervention that recognizes and seeks to address the causal relationship between alcohol use disorder and poverty and homelessness. Additionally, providers must advocate for systemic changes and combat discriminatory policies and practices that negatively impact individuals' health outcomes.

Examples of other measures that may facilitate equitable access to socioeconomic resources may include arranging for a translator for individuals with limited English or French, connection to immigrant and refugee services, or referral to gender-affirming care for trans individuals. Additionally, service providers should be sensitive to the power differentials inherent in the provider-client relationship, which may be exacerbated by negative experiences in the health care system due to discrimination. EQUIP Health Care provides several resources on this subject, including a Health Equity Toolkit to support service providers in implementing equity-oriented care into primary health care practice.

3.2 Client-centred Care

Research suggests that incorporating patient- and client-centred approaches in the clinical management of substance use disorders can improve retention in care, treatment satisfaction, and health outcomes.[138] Defined as "care that is respectful of, and responsive to, individual preferences, needs, and values," client-centred care involves listening to, informing, and empowering individuals as agents and experts in their own care.[139,140]

A practical strategy for incorporating client-centred care is the shared decision-making model in which decisions pertaining to the client's health and wellbeing are made collaboratively by the service provider and client based on shared information.[140,141] Specifically, three key strategies may be used to achieve effective shared decision-making: encouraging clients to set goals that are realistic and meaningful to them, providing sufficient information to assist selection from available and appropriate care options, and collaboratively developing care plans based on shared information and perspectives.[142] The involvement of peer and advocacy groups for people who use drugs, patient advocacy groups, peer workers, and people with lived and living experience[g] in all aspects of care provision can help facilitate shared decision-making by communicating and representing clients' needs and perspectives.

Although the evidence demonstrating the effectiveness of shared decision-making in substance use-related care is nascent, an established body of evidence examining the impact of collaborative treatment planning on symptom-related outcomes and treatment retention across a range of chronic conditions support this approach.[143-145] A 2016 systematic review of literature (N=25 studies) evaluating the effect of the shared decision-making model specifically in substance use-related care found 2 observational studies reporting that the vast majority of individuals with substance use disorders preferred to be

g People with lived and living experience are referred to by many names, including peers, people who use drugs, first voices, and drug users. This document primarily uses "people with lived and living experience" to highlight the first-hand knowledge and insights of individuals with lived and living experience of alcohol use disorder. Generally, the term "peer" is used to denote an individual with lived and living experience who acts as a supportive peer to other service users (e.g., peer worker).

involved in treatment planning and 3 studies demonstrating that matching patient preferences and values with treatment pathways resulted in reduced substance use.[141] In view of the available evidence in a range of health care fields, an increasing number of guidelines and legislation pertaining to the clinical management of substance use disorders recommend shared decision-making as an overarching principle of care.[141]

The use of person-first language and efforts to identify and address stigma are also noteworthy elements of client-centred care. Service providers should be aware of the language they use and its potential to stigmatize and alienate individuals who use substances. Service providers involved in substance use care should strive to use person-first language and current and non-stigmatizing medical terminology (e.g., "person living with alcohol use disorder") when interacting with clients, families, colleagues, other health care professionals, and staff.[146] While individuals with substance use disorders may choose to refer to themselves and their health conditions using the language they are most comfortable with, clinicians and other service providers should avoid using non-diagnostic, outdated, or "slang" terms (e.g., "addict", "alcoholic", "substance abuse", "clean/dirty") in conversation and when charting. Use of such terms by health service providers has been shown to be stigmatizing,[147,148] and stigma (both experienced and anticipated) has been associated with a reduced likelihood of accessing and remaining in care.[149-151] For more information, health service providers are encouraged to review Communicating about Substance Use in Compassionate, Safe and Non-Stigmatizing Ways, a resource developed by the Public Health Agency of Canada.[152]

3.3 Wellness and Self-determined Progress

Wellness should be recognized as one of the key goals of care across the AUD care continuum. People engaging in AUD care and support services may seek different care outcomes based on their own definition of wellness and progress. For example, for some individuals, wellness can be described through the concept of recovery, which may be understood as *"A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential."*[153] Service providers should view their role as partners in this self-determined process of improving wellness by providing holistic, client-

centered, and strengths-based approaches to substance use care that encompass both abstinence-oriented and harm reduction strategies.[154]

Progress towards wellness requires understanding, support, and referral to appropriate services to achieve self-determined goals. Service providers should use language that communicates respect of the client's autonomy and individuality, emphasizes their skills and strengths, and avoids reinforcement of paternalistic models of care provision.[155] Service providers should work collaboratively with clients to develop long-term, personalized, strengths-based wellness plans regardless of the severity, complexity, and duration of their substance use. The importance of peer navigators and peer support should also be recognized across the continuum of care for AUD. For wellness planning, MAP providers should consider incorporating peer navigators to support long term, client-centered treatment goals.

3.4 Trauma- and Violence-informed Care

Individuals with substance use disorders have higher rates of past trauma and comorbid post-traumatic stress disorder compared to the general population.[156] For example, an Australian systematic review found 12-month rates of PTSD in individuals with substance use disorders of 5–66%,[157] while epidemiological studies have found lifetime rates of 26–52%.[158] In light of these established findings, this guidance document strongly recommends that service providers working with individuals with alcohol use disorder be familiar with, and adhere to, the principles of trauma-informed practice, including trauma awareness; safety and trustworthiness; choice, collaboration and connection; and strengths-based approaches and skill building.[159]

It is recognized that some groups are more likely to have experienced trauma and violence than others. For example, Indigenous peoples, women, individuals experiencing poverty and homelessness, and Two-Spirit, lesbian, gay, bisexual, trans, queer, and other sexual and gender minority (2S/LGBTQ+) populations experience disproportionate rates of trauma and violence as a result of racism, discrimination, and social inequity compared to other populations.[160-162] Health care service providers should be familiar with specialized treatment and support services for individuals who have experienced trauma as well as crisis

services in their community, and provide information and referrals to clients, should the need arise.

It is important to note that trauma- and violence-informed care is not intended to treat trauma and should not be contingent on the client's disclosure of past trauma and experiences of violence.[159] The goal of trauma- and violence-informed practice is to create a safe and respectful environment that minimizes the potential for the re-traumatization of clients.[159] Consistent and universal adherence to trauma- and violence-informed approaches in all aspects of clinical practice help create a supportive setting for all clients, whether or not they have experienced trauma or violence in their lives.[163] Universal trauma precautions can also aid service providers in developing a consistent approach to working with people who have potentially experienced trauma and violence.[163]

Trauma-informed Practice Resources	
The Essentials of Trauma-informed Care	from Canadian Centre on Substance Abuse
Trauma-informed: The Trauma Toolkit	from Klinic Community Health Centre
Trauma-Informed Practice (TIP) Guide[159] New Terrain toolkit[161]	from Centre of Excellence in Women's Health
Trauma-Informed Care in Behavioral Health Services[164]	from Substance Abuse and Mental Health Services Administration
Trauma- and Violence-Informed Care Tool[165] Trauma- and Violence-Informed Care Workshop Trauma- and Violence-Informed Care Foundations Curriculum	from EQUIP Health Care

3.5 Care Considerations for 2S/LGBTQ+ communities

Two-Spirit, lesbian, gay, bisexual, trans, queer, and other gender and sexually diverse individuals (2S/LGBTQ+) face unique challenges as a result of social prejudice and discrimination, internalized stigma, and lack of health care provider competencies within the health care system.[166,167] For example, due to the persisting heteronormative and often stigmatizing practices in the health system, trans individuals tend to feel unsafe in healthcare settings and may delay accessing care. As a result, gender-diverse and sexually diverse individuals tend

to access care with more complex substance-related problems[168,169] and greater physical and mental health care needs[170,171] than individuals who do not identify as 2S/LGBTQ+. It is important to note that, while the prevalence of substance use and substance use disorders is higher among 2S/LGBTQ+ communities in comparison to the general population, research has attributed this to the need to cope with the toll of systemic discrimination and stigmatization; this population is not inherently at higher risk of substance use.[172-174]

Research related to general care settings has demonstrated that an inclusive and non-judgmental mindset, active demonstration of sensitivity to 2S/LGBTQ+ issues, and a reinforcement of confidentiality can help 2S/LGBTQ+ individuals feel safe accessing health care and psychosocial supports.[175] Strategies for creating a safe space may include training staff in the use of respectful and gender-affirming language; having information about 2S/LGBTQ+ programs and services displayed in waiting rooms and common areas (e.g., pamphlets, posters, resource guides); ensuring that intake forms and other materials use inclusive language; using open-ended questions when asking about gender and sexuality; and establishing contacts and referral partners in 2S/LGBTQ+ communities.[175] Service providers should be mindful that 2S/LGBTQ+ individuals may have experienced discrimination in the health care system and thus require extra sensitivity from health service providers to build trust.[175]

There is also emerging guidance on designing services to meet the needs of trans individuals in shelters, recovery housing, and other housing-based services, which would be especially relevant to the development of housing-based MAPs.[176,177] Considerations for the safe inclusion of trans clients include[176,177]:

- Maintaining confidentiality and not sharing information about clients' gender and sexuality with other residents unless the client wishes to do so
- In gender-segregated environments, ensuring that clients are allowed to choose facilities that best correspond with their gender identity
- Educating staff and residents on gender-inclusive language and behaviours and including gender inclusivity among program policies and standards of conduct
- Where possible and appropriate, offer trans clients beds/rooms in close proximity to staff stations to facilitate enhanced monitoring to ensure safety and privacy is facilitated without isolating or excluding them from resident life

While these considerations are helpful for service design, it is important for program developers and service providers to consult with members of 2S/LGBTQ+ communities when designing MAPs. Given the diversity of these communities, a standard monolithic approach to service provision is not likely to adequately meet the full scope of their needs.

More Information and Resources	
Equal Access for Transgender People	from US Department of Housing and Urban Development
Best Practices for LGBTQ+ Inclusion in Recovery Housing	from Ohio Recovery Housing
Gender-affirming Care for Trans, Two-Spirit, and Gender Diverse Patients in BC: A Primary Care Toolkit[178] Directory of services in BC	from Trans Care BC
Best Practices Guide: People's Pronouns	from Alberta Health Services
Neutralizing Clinical Language	from Heal All Consulting
Transgender support resources	from Canadian AIDS Society

3.6 Anti-racist Practices in Substance Use Care

Consistent with other forms of discrimination, racial/ethnic discrimination has been significantly associated with a higher risk of negative alcohol-related outcomes among communities of colour.[179-182] For example, a 2016 systematic review (N=97 studies, predominantly focused on African American participants) found that racial discrimination was associated with a higher risk of heavy alcohol use and AUD.[182] Additionally, a 2020 US national survey analysis (N=17,115) examining the correlation between racial discrimination and AUD severity found that, in comparison to those who did not experience discrimination, individuals who experienced discrimination had a 1.5-fold greater risk of mild AUD, a 1.6-fold greater risk of moderate AUD, and a 2.3-fold greater risk of severe AUD based on the DSM-5 criteria.[181] Referring to literature that identifies discrimination as a stressor, the authors attribute these findings to the participants' need to cope with the effects of interpersonal and systemic racism.[181,182] Research has also shown that members of racialized communities face more barriers to treatment access,

lower retention, and reduced satisfaction compared to their white counterparts, due to the experience of discrimination within the health care system.[179,180]

The implementation of an anti-racist framework for substance use care can help improve care engagement and health outcomes for racialized clients and other populations that experience marginalization.[183] By definition, anti-racism is a process of confronting and interrogating racist structures which persist within current sociocultural institutions, including the health care system.[183,184] Anti-racist practices require individuals to build awareness of their own position and role within these oppressive constructs, critically revising their own values, and actively challenging norms, policies, and practices that marginalize racialized members of society.[183,184]

Some examples of inclusive, anti-racist policies and program development considerations include: [185]

- Seek pre-implementation consultation from members of racialized and ethnically diverse communities that the program serves
- Prioritize racial and ethnic diversity and equity in employee hiring and retention practices
- Mandate anti-racism trainings among all staff
- Build partnerships with community organizations that support members of racialized communities

Some day-to-day service elements that support members of racialized communities may include: [185,186]

- Provide interpretation and translation services to clients for whom language is a barrier to equitable program participation
- Ensure that client materials are written provided in the client's language, and at an appropriately accessible reading level
- Include a strong outreach component, as people who are new to Canada, or to a given province or territory, may be unaware of the types of substance use support services available or how to access them
- Provide space and other necessities for religious or cultural practices
- Establish a confidential and clearly-defined and communicated procedure for clients and employees to safely report racial discrimination

3.7 Cultural Safety and Humility

Abundant evidence has demonstrated that historic and present-day colonialism has disrupted the health and well-being of Indigenous peoples in Canada. Decades of federal policies with the sole purpose of eradicating Indigenous identities, families, communities, culture, and traditional ways of life (i.e., genocide) have resulted in direct and intergenerational trauma, racism, and discrimination.[62-64] These factors manifest as an overall increased risk of premature morbidity and mortality among Indigenous peoples in Canada relative to non-Indigenous Canadians.[65-67] Epidemiological data that show higher prevalence of high-risk substance use, substance use disorders, and substance-related harms among Indigenous peoples[65,68] must also be interpreted within this broader context. More specifically, it is emphasized that Indigenous peoples are not, by nature of their genetic background and cultural identity, a "high-risk" population; rather, the settler state's approach of erasure, displacement, and assimilation of Indigenous peoples has led to significant health and social inequities and created conditions where some individuals use alcohol and other substances to cope.[69,70] Racism and stigma about Indigenous peoples, particularly around alcohol and other substance

use,[71-73] persists within Canadian society and the health care system, which deters this population from seeking out and staying engaged in care.[74-76]

If the mainstream Canadian health care system is to be effective in addressing health and social inequities experienced by Indigenous peoples, service providers must make a meaningful commitment to providing culturally safe and anti-racist care and exercising cultural humility.[77] Cultural safety is characterized as an outcome that is achieved when the person receiving care or accessing a service feels safe and perceives their environment as a space that is free from racism and discrimination and where they are able to practice their culture. Achieving this outcome depends on respectful engagement that seeks to address power imbalances inherent in the health care system. Cultural humility is a self-reflection process undertaken to understand personal and systemic biases and to develop and maintain respectful processes and relationships based on mutual trust; it requires humbly acknowledging oneself as a learner when attempting to understand another person's experience.[h]

This document strongly recommends that all health care professionals, health care staff, and housing staff undertake Indigenous cultural safety training to improve their ability to establish safe, positive partnerships with Indigenous clients and families. Care teams and staff are also encouraged to familiarize themselves with the Truth and Reconciliation Commission Reports, specifically the Calls to Action, which outline necessary actions to address the legacy of colonialism in a range of domains including health care. There are a number of Indigenous cultural safety training programs available to health service providers and staff across Canada.

h Definitions adapted from the First Nations Health Authority.

Indigenous Cultural Safety Training Programs

- The National Indigenous Cultural Safety Collaborative Learning Series
- The Ontario Indigenous Cultural Safety Program
- Nunavut Program's Cultural Competency Modules
- The Saskatoon Health Region Cultural Competency & Cultural Safety Tool Kit
- The Manitoba Indigenous Cultural Safety Training
- The San'yas Indigenous Cultural Safety Training Program offered by the Provincial Health Services Authority (PHSA) Aboriginal Health Program in BC
- First Nations Health Authority (FNHA) and BC client Safety & Quality Council's Cultural Safety and Cultural Humility Webinar Action Series
- Reconciliation Education online course
- An online course titled New Respect Indigenous Cultural Safety presented by Public Health Training for Equitable Systems Change (PHESC)
- A comprehensive 12-module free online course titled Indigenous Canada offered by the University of Alberta Faculty of Native Studies, which is designed to familiarize learners with issues affecting Indigenous-settler relations across Canada today while exploring Indigenous histories, cultures, and perspectives

3.7.i Access to Cultural Practices

While the worldviews and traditions of Indigenous peoples vary widely, Indigenous approaches to health are typically holistic, relational, and focused on balancing physical, spiritual, mental, and emotional wellness.[187] However, many substance use-related service providers subscribe to a biomedical approach that is disease- and individual-focused—an approach that has been acknowledged as largely incongruent with Indigenous worldviews.[188] Conventional substance use care has been shown to be less effective for, and in some cases potentially harmful to, Indigenous people[187,189]; this has been partially attributed to the lack of cultural practices incorporated into treatment interventions[189] and delivery of care that does not adhere to Indigenous values and worldviews.[187]

There is widespread agreement among Indigenous Elders, Indigenous healers, and researchers, that the inclusion of cultural practices in substance use care is essential to promoting healing for Indigenous peoples.[190] Substance use interventions that incorporate Indigenous cultural practices have been found to improve the physical, mental, emotional, and spiritual health of Indigenous clients (e.g., reduced substance use, reduced rates of mental health issues, improved relationships, increased participation in cultural practices).[190] A diversity of locally and culturally relevant and appropriate traditions and practices can be integrated into substance use-related services. Depending on the local context and available resources, capacity, and expertise, some specific examples of cultural practices may include smudging, cedar brushing, storytelling, teachings, fasting, carving, beadwork, land-based healing activities, pow-wows, traditional foods and medicines, language, talking circles, drumming, singing, community feasts, sweat lodges, and prayer.[188]

Indigenous clients have an inherent right to access cultural practices as part of their health care, as acknowledged and highlighted by Call to Action #22 of the Truth and Reconciliation Commission, which calls on the health care system to recognize the value of Indigenous cultural practices and to use them in collaboration with Indigenous Elders and healers when delivering care to Indigenous people.[191] In recognition of this, service providers should ensure that Indigenous people can access cultural practices.

- Individual service providers should familiarize themselves with cultural resources in their community; health authorities, hospitals, and First Nations treatment Centres may provide locally appropriate cultural practices and/or may be able to connect clients to cultural navigators, interpreters, Elders, or Knowledge Keepers.
- Service providers should ask Indigenous people about their interest in including cultural practices as part of care, while understanding that Indigenous people have differing levels of involvement and interest in cultural practices.
- Some Indigenous people may already be engaged in cultural practices, whereas others may have no interest in accessing cultural practices. In either situation, service providers should offer support and be aware that the individual preferences for accessing cultural practices may change over time.
- If a client is already engaged in cultural practices, service providers should, with the consent of the client, work collaboratively with the client's Elder or healer in care planning.
- Clients who do not have an Elder or healer may be connected to one within the care setting, if available, or in the community.
- Service providers may also inform clients of any sacred spaces that are available to Indigenous people in the care setting. Any client requests to access a specific cultural practice or medicine should be satisfied within a timely manner.

Service providers can request support from the Indigenous or Aboriginal health team within their local health authority when providing care to Indigenous individuals. Indigenous navigators/liaisons support clients, families, and service providers by[192,193]:

- Connecting clients with Elders and other cultural supports
- Facilitating communication between client and care teams
- Assisting with referrals within the health authority and to community organizations, acting as an advocate on the client's behalf
- Liaising with Indigenous communities and organizations

- Arranging for translators
- Guiding clients through the health care system

Care teams and staff should refer to their health authority for more information about available support through Indigenous or Aboriginal health teams.

3.7.ii Need for Indigenous-led Services

In addition to providing culturally-safe care that incorporates access to cultural practices across the continuum of substance use care, it is vital to understand the importance of the Indigenous-led development of services for Indigenous clients.[194] One example of an Indigenous-led MAP is Ambrose Place in Edmonton, Alberta, a supportive housing facility providing its predominantly Indigenous clients with wrap-around care grounded in Indigenous knowledges, cultural traditions, and perspectives on wellness and healing.[195] A 2018 qualitative Report Based on Sharing Circles with Residents and Staff from Ambrose Place describes clients' healing sense of belonging and connection with the Indigenous staff, which have contributed significantly to improved health and housing stability.[195] That report emphasizes the need for Indigenous harm reduction programs, including MAPs, that are designed, developed, and operated through Indigenous leadership and with Indigenous clients.

3.8 Harm Reduction

Harm reduction is the core guiding value of MAPs. Harm reduction has been defined as "policies, programs and practices that aim to minimise negative health, social and legal impacts associated with drug use, drug policies and drug laws. Harm reduction [...] focuses on positive change and on working with people without judgement, coercion, discrimination, or requiring that they stop using drugs as a precondition of support."[45] Although most often associated with the use of illegal substances, harm reduction approaches can also be applied to any behaviour that increases risk of adverse health, social, or legal consequences for an individual, including alcohol use.[46]

At its core, a harm reduction-oriented approach to alcohol use supports any steps taken by clients to improve their health and wellbeing and seeks to meet clients "where they are at" in terms of willingness and ability to change.[46] Service providers are encouraged to adopt strategies to minimize alcohol-related harms rather than imposing abstinence from alcohol as the only desirable outcome of treatment. In addition to the provision of managed alcohol, harm reduction strategies may include promoting safer drinking strategies (e.g., reducing drinking gradually, not drinking and driving, regulating drinking schedule to avoid binge drinking or withdrawal, reducing use of non-beverage alcohol), optimizing engagement and retention in health care, and connecting clients with resources to address inequities in the social determinants of health (e.g., housing, legal services, financial assistance, employment programs).[47-50]

3.8.i Indigenous Harm Reduction

An Indigenous approach to harm reduction recognizes the social and systems-level inequities that have contributed to substance use and its harms among Indigenous people.[194] As such, Indigenous harm reduction seeks to reduce the egregious harms of colonialism.[194] The Indigenous approach imbues harm reduction principles and practices with Indigenous knowledges, values, and concepts of wholistic and relational wellness, rather than focusing on individuals' substance use behaviours.[194,196,197]

Characteristics of Indigenous Harm Reduction

- **Decolonizing**—helping individuals begin to reverse the impact of colonialism by honouring their autonomy and agency. In the context of substance use care, this involves providing client-centred, culturally safe, and trauma-informed care, as well as empowering Indigenous organizations to lead the development of services for Indigenous peoples
- **Indigenizing**—supporting programs and policies that are grounded in Indigenous knowledges and incorporating local Indigenous teachings, traditions, ceremonies, and languages in programs serving indigenous clients
- **Holistic and wholistic**—supporting physical, mental, and spiritual wellness by addressing social determinants of health including housing, education, cultural practices, and other psychosocial supports
- **Inclusive**—actively opposing "hierarchies of worthiness" imposed by colonial value structures. This involves respectful and non-judgemental care regardless of age, gender, sexuality, literacy levels, socio-economic status, criminal backgrounds, spiritual belief, and substance use behaviours
- **Innovative and evidence-based**—combining the best of Indigenous and mainstream approaches into effective and culturally grounded care

from the Canadian Aboriginal AIDS Network[194]

For further information, see *Indigenous Harm Reduction—Reducing the Harms of Colonialism* developed by the Canadian Aboriginal AIDS Network and the Interagency Coalition on AIDS and Development. Additionally, BC's First Nations Health Authority (FNHA) has developed a fact sheet on Indigenous Harm Reduction Principles and Practices which may be useful.

3.9 Integrated Health Management

Care for individuals with AUD is most effective with the utilization of a holistic care approach that facilitates access to comprehensive health care and appropriate community-based services. As part of their implementation and operation, MAPs should establish fully functioning referral pathways to substance use treatment and harm reduction services, as well as psychosocial services and supports in their local area. Programs may employ a range of procedures to facilitate connection to care and support services. These may include:

- Arranging periodic on-site visits by essential service providers
- Setting up equipment and space for virtual appointments
- Offering case management services that include assistance with booking and attending medical and psychosocial appointments
- Offering clients information on locally available services

Providers should work with clients to determine which additional services and care will help them meet their goals. Possible relevant services include:

- Primary care
- Addiction care
- Counselling
- Social work
- Mental health care
- Dental care
- Occupational therapy
- Nutritional support and food programs
- Respiratory therapy
- Medication management
- Financial management and assistance
- Outreach and home health
- Sex worker support
- Support for clients who have experienced human trafficking and forced labour
- Pain management
- Hospice care and services
- Elder and Knowledge Keeper support
- Access to cultural teachings and land-based healing practices
- Disability services
- Psychiatry
- Spiritual support
- Women's only hours
- Harm reduction education and supplies
- Supervised consumption services
- Intensive case management ("wrap-around service")
- Housing assistance
- Income assistance
- Legal assistance
- Palliative care
- Peer support
- Specialized medical care
- Perinatal care
- Childcare
- Family support
- Refugee services
- Employment services

4 Program Implementation

This section provides guidance on logistical aspects related to implementing MAPs, including preliminary stakeholder consultation, selection of managed alcohol provision model(s) and ancillary services to implement, location and space considerations, staff competency and workflow considerations, and funding considerations.

4.1 Pre-implementation Stakeholder Consultation

As with any new or expanded health service, stakeholder input can help facilitate program implementation and improvement. In particular, consulting people with lived and living experience is vital to the development of client-centred harm reduction services. Additionally, while not a requirement for the establishment of MAPs, consultation with other stakeholders (e.g., municipal, provincial, and federal governments and health authorities) may be useful for garnering support, establishing collaborations, and informing the development of policies and resources that facilitate the expansion of client-centred harm reduction services and supports.

4.1.i People with Lived and Living Experience

Engaging people with lived and living experience[i] in policy making, programming, operational processes, and evaluation efforts is a fundamental principle of harm reduction.[64] Peer advocacy groups, such as Vancouver's Eastside Illicit Drinkers Group for Education (EIDGE), have played a central role in the implementation

i People with lived and living experience are referred to by many names, including peers, people who use drugs, first voices, and drug or alcohol users. This document primarily uses "people with lived and living experience" to highlight the knowledge and insights individuals with lived experience of alcohol use disorder have. Generally, "peer" is used to denote when individuals with lived and living experience would be acting as a peer to other service users (e.g., peer workers).

and expansion of MAPs through advocacy efforts and research participation.[53,64] Peer and peer advocacy groups for people who use substances can help identify the specific needs of potential service users, barriers to service implementation and access, and strategies to overcome these challenges. Additionally, peer and advocacy groups typically have active community and political networks to promote and support the program.

It is strongly recommended to integrate collaborative input from peer and advocacy groups for people who use substances, patient advocacy groups, and peer workers into all stages of MAP implementation, from planning to operation.

Strategic plans should include the voices of those clients who will access these services. It should be noted that the majority of existing MAPs have a mechanism for obtaining peer or client input, either through informal consultations or through formal advisory meetings.

Local people with lived and living experience and peer groups in each jurisdiction should be consulted. In jurisdictions where MAPs have never been developed, it may be helpful to consult groups from other communities whose members have experience receiving or supporting MAPs, as well as individual current or past MAP service users.

For further information on the meaningful engagement of people with lived and living experience in the implementation of substance use care programs, consult "Nothing About Us Without Us"—Greater, Meaningful Involvement of People Who Use Drugs: A Public Health, Ethical, and Human Rights Imperative[198] and From One Alley to Another: Practice Guidelines to Better Include People who Use Drugs at your Decision-making Tables.[199]

This document identifies several important benefits to peer involvement in the implementation process, including enhanced client "buy-in" to the program; improved ability to identify and address clients' needs through realistic, low-barrier, and useful service delivery; and promoting a sense of ownership among peers.[198] For further information on peer engagement, see Resources for Guiding Peer Employment.

4.1.ii Other Stakeholder Groups

Managed alcohol program planners may wish to reach out to relevant ministries, health authorities, and other stakeholder groups to secure resources and support, raise awareness among community partners regarding the role of MAPs, establish and strengthen collaboration and referral pathways across the care continuum, and inform the development of harm reduction-oriented policies and practice standards. **While consultation may assist in the implementation of MAPs, the establishment of managed alcohol programs in Canada does not require approval from any municipal, regional, provincial, or federal body.**

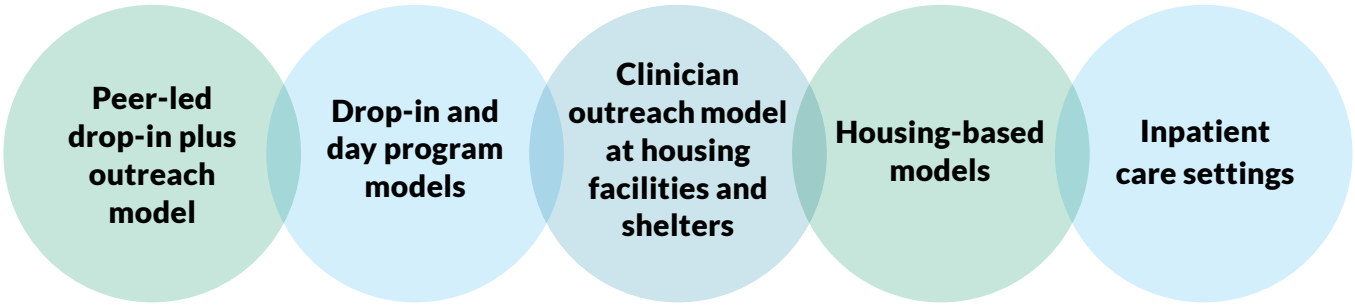
Local Authorities	Contact with police and emergency services is not uncommon in MAPs; promoting an understanding of MAPs as an evidence-based and established harm reduction intervention among local emergency and law enforcement may help support safer interactions with law enforcement or diversion from emergency services (e.g., on occasions when clients need to be transferred to the hospital or removed from the program by the police).
Regional Health Authorities	A number of MAPs in Canada, particularly programs developed in response to COVID-19, have received funding from regional health authorities.[110] Program planners may choose to consult with the health authority to garner support and maintain collaborative relationships.
Professional Regulatory Bodies for Physicians and Nurses	The regulatory bodies for physicians and surgeons, nurse practitioners, and nurses in each jurisdiction may be informed about MAPs to garner support for including MAPs in the continuum of AUD care. In some jurisdictions, this may include consultation and support in legal aspects of managed alcohol provision.
Provincial Ministries	In view of the health system's growing support for the development and expansion of MAPs, program planners may consider consulting with the relevant ministries in their jurisdiction to: • Generate support and potential funding for the operation of MAPs • Navigate and potentially inform jurisdictional regulations affecting the procurement and provision of alcohol in the context of MAPs • Collaborate on the development of harm reduction-oriented policies and practice standards
Health Canada	Programs may choose to consult with Health Canada to garner support, request funding, and maintain collaborative relationships.

4.2 Models of Managed Alcohol Provision

Like other harm reduction services, a variety of MAPs have developed organically in response to the needs of their respective communities; this has resulted in a diversity of settings, service delivery approaches, and supplementary supports. However, the core characteristics and harm reduction elements of existing MAPs are similar. Most MAPs are designed for individuals with severe AUD who are not engaged in the existing continuum of clinical AUD care and particularly for those who face additional barriers to health care and social services due to poverty and homelessness. To reduce the health and psychosocial harms of untreated AUD in this marginalized population, almost all existing MAPs combine regulated beverage alcohol provision plans with a range of health and social services that typically include primary care, housing services, nutritional support, and financial management.[123] While recognizing the significant areas of overlap and interchangeability among the existing MAP models, this section presents five discrete examples of models of service, which are primarily based on setting.

It is important to note that the generalized models outlined in this section are presented as examples to support a discussion of planning and operation considerations in this document. Creative and flexible approaches are needed for the development of MAPs that are primarily informed by the needs, circumstances, and preferences of local communities.

Based on the setting where managed alcohol is provided, MAPs can be divided into 5 general categories:



A description of existing MAP models is provided below while the Jurisdictional Scan and Appendix 2 offer a more comparative description of service design elements of the models.

4.2.i Peer-led Drop-in Plus Outreach MAPs

Developed and operated by peers who may also use the service, peer-led drop in plus outreach MAPs offer fellow members managed alcohol and a safe environment to consume alcohol, socialize, and access health and psychosocial services during operating hours.[67] This model does not include a housing provision component; however, it includes outreach services through which some members may receive daily alcohol delivery in their current residences. In this model, members may be employed to lead various aspects of programming, such as peer support, safer drinking education, and brewing the alcohol provided through the MAP.[67] This model can promote autonomy, self-efficacy, and sense of community among its members in addition to reducing the harms associated with survival drinking (e.g., non-beverage alcohol use, survival economic activity to obtain alcohol, binge drinking cycles).

While peer-led drop-in and outreach MAPs typically include access to on-site clinicians and some level of clinician consultation or oversight, the focus of this model is on safer drinking and low-barrier access rather than regimented alcohol management. Due to its accessibility, inclusively, and flexibility, this peer-run model is able to meet the needs of a broader range of clients, such as individuals who face risk of alcohol-related harm due to binge drinking but may not qualify for other MAP models because they do not meet the criteria for severe AUD. This model's effectiveness in reducing alcohol-related harms and fostering psychosocial stability in marginalized individuals with AUD was demonstrated by a 2021 qualitative study of the peer-run Street Entrenched Managed Alcohol Program in Vancouver (see the Qualitative Findings section).[67]

This model does not include an accommodation component for individuals experiencing homelessness, although it may offer clients referral to housing services in the community. Additionally, due to lack of 24-hour services or comprehensive monitoring and clinical support, this model may not be appropriate for individuals who may face access barriers due to transportation, mobility, or cognitive support needs.

4.2.ii Drop-in and Day Programs

Drop-in and day MAPs are designed to provide eligible clients with managed alcohol and a safe community-based environment to consume alcohol and access health and psychosocial services during operating hours. Drop-in and day MAPs may operate as stand-alone facilities or may be co-located with other relevant services. The primary aim of these programs is to reduce survival drinking and its harms, enhance wellbeing, improve community connections, and facilitate access to health, housing, and psychosocial services and supports.[107,200]

In some existing drop-in and day MAPs, clinicians (e.g., physician, registered nurse) develop tailored alcohol management plans collaboratively with clients and staff; however, alcohol dispensation and day-to-day program oversight are typically the responsibility of non-clinical staff who have received harm reduction training (e.g., case managers, peer support workers). It should be noted that, while existing MAPs representing this model are clinician-led, this is not be a fundamental requirement of drop-in day programs; managed alcohol may be provided by harm reduction-trained non-clinical staff in consultation with clinicians as appropriate.

Currently, clinician-led day or drop-in models are utilized by a small minority of MAPs, and there is limited research evaluating their effectiveness. In 2017, a clinician-led day MAP in Sudbury underwent qualitative and quantitative review to evaluate the program's effectiveness in promoting housing stability, reducing non-beverage alcohol use, and decreasing emergency service use.[200] While results demonstrated some success in reduction in homelessness and increased access to non-emergency care, the impact of the program on housing satisfaction, total alcohol use, and other health and quality of life outcomes was limited, likely due to ongoing homelessness and inconsistent connection with clients.[200] Although clinician-led drop-in and day MAPs are equipped to provide clinical care and a safe space during program hours, they lack the required infrastructure to provide housing and a full range of supports for those who return to the street outside of program hours. The Sudbury program evaluation report led the MAP to transition to a housing-based model. A case study of the Sudbury MAP is provided in Appendix 2 Case Study: Sudbury, Ontario.

4.2.iii Clinician Outreach MAPs

Many clinician outreach MAPs emerged in response to the COVID-19 pandemic; managed alcohol prescribing and delivery enabled individuals at risk of alcohol withdrawal to safely self-isolate at home, in shelters, or in other facilities designated for quarantining.

In this model, a clinician (e.g., physician, registered nurse) conducts an initial assessment of the client's care needs on an outreach basis and recommends an alcohol dose to be delivered to the client by staff at set intervals. Alcohol administration in this model can be based on either a scattered site approach, whereby outreach staff make alcohol deliveries to multiple sites up to 3 times a day, or a fixed site approach where outreach staff are stationed at a single site during daytime hours to administer alcohol.

Health care supports for clients of clinician outreach MAPs typically include intensive case management to address current care needs and facilitate transition to community-based care. The scope of additional services offered is dependent on the program's capabilities; in addition to food and accommodation, clients in temporary shelters or supportive housing facilities may be offered referrals to housing services and other psychosocial supports.

4.2.iv Housing-based MAPs

Most MAPs operating in Canada serve clients experiencing homelessness and are embedded in, or coupled with, temporary accommodation such as shelters, transitional housing, and supportive housing facilities. The bulk of available published evidence supporting MAPs is derived from housing-based models. Like other models, housing-based MAPs are intended to reduce alcohol-related harms, facilitate housing stability, and ensure sustainable access to health care and psychosocial supports. The distinguishing feature of this model is that MAP clients are housed on-site. In addition to providing accommodation, this model allows for continuous and consistent case management, monitoring, and continued provision of psychosocial services and supports.[107]

In most existing housing-based MAPs, alcohol dosage and management planning is typically performed by an on-site clinician (e.g., a nurse in consultation with a prescriber) in collaboration with the client, following clinical assessment.[107] However, clinician-led managed alcohol planning is not a fundamental requirement of this MAP model; non-clinician harm reduction staff (e.g., case managers, social workers) may be trained to conduct initial assessment and managed alcohol planning in consultation with a clinician. The operation of the facility in many housing-based MAPs is undertaken by harm reduction-trained non-clinical staff (e.g., housing staff, case managers, peer support staff).

The type and scope of services offered in housing-based MAPs vary based on the characteristics and needs of their clients. For example, Ambrose Place in Edmonton, Alberta, is an Indigenous led and developed housing-based MAP whose support staff includes Knowledge Keepers and Elders who incorporate cultural perspectives and practices in the care of their predominantly Indigenous clients.[195]

4.2.v MAPs in Inpatient Care Settings

Hospital-based MAPs and MAPs offered in other inpatient care settings (e.g., long-term care facilities) help retain clients for the duration of their care by avoiding patient-initiated discharge due to alcohol withdrawal symptoms or cravings. They can also help decrease the need to consume non-beverage alcohol (e.g., hand sanitizer, alcohol swabs). This MAP model ensures that engagement in acute medical care does not preclude sustainable access to alcohol. The duration of clients' engagement in this MAP model is generally limited to the duration of their stay in inpatient care. Where possible and appropriate, individuals receiving managed alcohol are connected to community MAPs upon discharge. Depending on local resources, discharge to a community MAP may not be possible; in these cases, clients can be connected to other services including primary care, mental health or substance use treatments and supports, housing agencies, and other community supports.

4.2.vi Considerations for Selecting Setting and Model(s) of Care

The models and elements of care to be offered in a given jurisdiction will depend on multiple factors, including:

- The estimated number of clients who would benefit from and be eligible for MAP
- The infrastructure and services already in place (e.g., existing housing programs, wet shelters, community outreach programs) and the feasibility of providing an embedded MAP within an existing service
- Available funds and funding sources
- The community characteristics (e.g., rural and urban settings will likely differ in terms of infrastructure and size of client population)
- Client population characteristics and needs
    - Individuals experiencing homelessness or at risk of homelessness who require accommodation or connection to housing services
    - Individuals requiring close medical supervision due to co-occurring substance use disorders or other comorbid health conditions, those in need of palliative care
    - Indigenous clients, for whom Elder support and access to relevant cultural resources and activities, including land-based healing, should be provided
- The number of staff and staffing models available (i.e., clinical or non-clinical staffing)
- Access to other ancillary staff and services within the community, both during MAP participation and following discharge from MAP

4.3 Additional Elements of Service for All Models of Care

Depending on the setting and available resources, programs should meet clients' basic needs, such as food and accommodation, and facilitate access to wrap-around care and psychosocial services. Additionally, regardless of the selected models of care, MAPs should develop program rules and policies, in collaboration with clients and peers, to ensure staff and client safety, health, and wellbeing. This section provides a brief overview of these elements of service.

4.3.i Food and Accommodation

The majority of MAP clients face significant barriers to meeting their basic nutritional and housing needs. Accommodation and daily meals are the primary elements of service in MAPs that operate in housing-based settings such as shelters and supportive housing facilities. As a core aspect of harm reduction, all MAPs should endeavour to meet the nutritional needs of clients to the extent possible. Some programs may seek voluntary support from clients who can contribute to meal planning and preparation and the day-to-day maintenance of their housing facility. In addition to maximizing the reach of available resources, this approach has been shown to foster a sense of belonging and responsibility among participating clients.[64]

Community MAPs that operate as day programs and do not have access to space or resources to provide clients with meals should have protocols in place for connecting clients to services that provide housing and nutritional supports.[64]

4.3.ii Additional Services and Wrap-around Care

Additional services provided by MAPs may include primary care; psychosocial treatment interventions and supports; peer support programs; addiction medicine specialist consultation; trauma therapy; disability support; chronic pain management; specialized services for women, youth, older adults, and 2S/LGBTQ+ individuals; and dedicated health care and cultural practices for Indigenous clients.

Some programs may co-locate or partner with community organizations that provide psychosocial services and supports, while others may offer some services on-site (e.g., counselling, housing workers, peer support) and refer out to other community services. All programs should incorporate comprehensive referral pathways to ensure that clients can access the psychosocial services they need. Programs that provide ancillary services on site will need to ensure adequate staffing.

4.3.iii Financial Management Services

Managed alcohol programs may consider incorporating financial management services, such as voluntary trusteeship[j] among their services. In addition to supporting financial independence among clients, financial management services can play a significant role in funding the operation of the MAP by ensuring that the MAP receives expenses that the client is responsible for (e.g., the cost of lodging, alcohol, food) in a timely manner. By ensuring access to funds to cover client expenses, financial management services can be instrumental to retaining clients in the program and preventing conflicts or eviction related to program fees. Additionally, financial management services can contribute to minimizing alcohol consumption outside the program by helping redirect the client's funds towards needed expenses, based on patient goals, preferences, and consent.

In order to receive voluntary financial management services, the client typically authorizes the program to receive the client's monthly income, deduct the agreed upon fees for MAP services, and dispense the remaining funds in agreed upon increments to support sustainable budgeting for the client's monthly expenses. Depending on the financial management agreement reached with the client based on their needs and preferences, the remaining funds may be divided

j In the context of MAPs, the term "voluntary trusteeship" is used to refer to an optional and collaborative process whereby the client agrees to receive advice and support in allocating their income so that their basic needs are met; this process can be modified or terminated according to the client's preferences and needs at any time. This is distinct from the legal understanding of trusteeship where a court-appointed trustee makes financial decisions for a person deemed incapable of doing so.

into daily or weekly installments or dispensed to the client at an agreed upon interval. Additional financial management supports may include collaborative budget development and support with shopping (e.g., budgeting for essential items or providing assistance for shopping errands). Programs that do not have the capacity to provide this service should consider having a protocol in place for referring eligible and interested clients to a public trustee or local credit counselling service for more support.

Financial management procedures should adhere to the principles of client-centred service and prioritize the client's autonomy and financial independence while ensuring client and staff safety. Further discussion of voluntary financial management principles and procedures is provided in Appendix 3.

4.3.iv Program Guidelines and Policies

Each MAP should develop its own set of guidelines and policies in collaboration with clients, staff, and peers. The development of program guidelines and policies should be led by principles of client and staff dignity, respect, and safety. Program rules and policies should be clearly discussed with each client at intake and included in a client alcohol management plan agreement. See Appendix 4 for a sample alcohol management plan and client agreement form.

To ensure a mutually respectful environment and to mitigate the client–provider power differential, clients' expectations from the program can be included a in a client bill of rights which should also be discussed and agreed upon at intake. A sample client bill of rights is provided in Appendix 5.

Outside drinking policies

Where possible, MAPs should develop clear policies to minimize drinking outside the program, as this has been shown to interfere with the program's central goal of regulating alcohol consumption and may lead to harms such as non-beverage alcohol use, violence, encounters with the police, overdose, and hospitalization.[96,125] Relevant policies to consider include refusing or reducing alcohol dose if the client is intoxicated at the time of dose dispensation and not allowing outside alcohol on the MAP premises.[125] It is noted that recurrent

outside drinking and intoxication may be an indication that the current alcohol management plan is not adequately meeting the client's needs; there should be procedures in place to revise the alcohol management plan in collaboration with the client to ensure that alcohol dosage is adequately managing cravings and withdrawal symptoms.

Specific outside drinking policies will depend on program model, resources, intensity of care, and monitoring required. For example, some housing-based MAPs caring for clients with more intensive needs may prohibit bringing outside alcohol to the program premises to control the type and amount of alcohol consumed, while other programs may permit clients to purchase their beverage of choice and sign them into the facility (typically in unopened bottles).

In developing outside drinking policies and protocols for communicating and implementing those policies, it is important to adopt a non-punitive approach with a focus on program retention and promoting sustainable safer drinking habits. The admission process may include a discussion to support responsible decision making with respect to drinking in social settings outside the program. For example, programs could allow clients to have a drink at a restaurant, while encouraging clients to be mindful of pre-dose assessment requirements and policies regarding intoxicated individuals.

Ongoing use of other substances

Managed alcohol programs should develop clear policies to identify and address the active use of other substances. Program eligibility assessment protocols should include screening for the use of other substances. Staff should speak to clients about the importance of sharing information regarding their substance use in order to receive tailored support. Procedures should be in place to offer brief intervention and referral to treatments and support services to clients who self-report other substance use or screen positive for other substance use or substance use disorders.[k]

k For more information, see the BCCSU's brief resource on Managing Co-occurring Opioid and Alcohol Use Disorders.

The ongoing use of other CNS depressants (e.g., opioids or benzodiazepines) should be assessed carefully during the program, as these substances can potentiate the effects of alcohol and lead to overdose and death. In addition to screening for the use of other substances at intake, MAP providers should inform clients of the risks associated with the concurrent use of other CNS depressants at intake, encourage them to refrain from using other CNS depressants, and provide education on safer use strategies if they continue to use other CNS depressants (e.g., avoiding using alone, starting with a lower dose, accessing drug checking services).

However, while the ongoing use of other substances should be assessed as a risk during care planning, it should not be considered a barrier to MAP participation. Managed alcohol clients are typically stabilized on lower doses of alcohol than they would use outside of the MAP. Additionally, engagement in the MAP may facilitate connection to addiction care that leads to a reduction in the use of other substances as well. Thus, the benefits of MAP participation likely outweigh its risks. Measures to address the use of other substances among MAP clients may include:

- Referrals to appropriate substance use treatment and supports
- Referrals to harm reduction programs and supplies
- Increased monitoring
- Staff training in overdose prevention and response
- Staff training in the identification and management of stimulant-induced psychosis
- Intensified psychosocial interventions and supports

Clear procedures should be established to respond to overdoses and other substance-related emergencies, in collaboration with the client, including when clients may need to go to hospital.

Pre-dose assessment procedures should include the identification of intoxication and recent use of other substances. Clients who present for their alcohol dose intoxicated or disclose having recently used other CNS depressants should be offered a conversation to assess their wellbeing and the risks associated with

consuming more alcohol. Based on the assessed overdose risk, staff may decide to withhold the next dose to prevent respiratory depression and overdose. This decision should be clearly explained to the client.

Note on cannabis use:

According to available data, many MAP clients periodically use cannabis to manage alcohol cravings and withdrawal or to alleviate pain, anxiety, or insomnia.[101] Procedures for addressing other substance use should include offering MAP clients specific information regarding the risks and benefits of cannabis use. Depending on clients' needs and availability of resources, MAPs may consider establishing pathways and protocols for offering clients cannabis as a substitute option for some alcohol doses. For more information, see section on Emerging Evidence on Cannabis Substitution in MAPs.[l]

Possible considerations to include in safety policies:

- Rules for smokers
- Policies concerning open flames and flammable materials
- Monitoring the use of knives and other hazardous personal items

l There are currently no established protocols for the provision of cannabis as a partial substitute for alcohol in the literature; this recommendation is in reference to data on existing unregulated cannabis use among MAP clients, as well as emerging findings on the feasibility and acceptability of cannabis.

4.4 Location and Space Considerations

4.4.i Considerations for Selecting Location

A key consideration for the selection of MAP location is client access. Managed alcohol programs should be located within the communities they intend to serve; proximity to other health and social services for people with AUD should be prioritized to ensure access to wrap-around health and support services. Proximity to public transportation should also be considered to ensure access, particularly in the case of services that do not include accommodation.

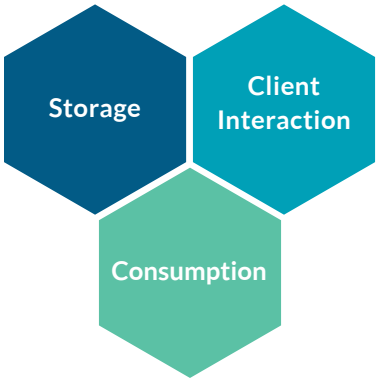
Availability of alcohol suppliers is also a factor to consider. Having alcohol suppliers in close proximity can facilitate alcohol procurement and delivery for the program; however, as MAPs aim to minimize alcohol consumption outside the managed alcohol agreement, it may be necessary to consider the potentially triggering effect of proximity to liquor stores, bars, and corner stores when selecting MAP locations.

4.4.ii Considerations for Selecting and Designing Space

General space requirements

Space requirements vary with the setting, model(s) of care offered, the number of clients served, the range of co-located services or programs, and specific storage and dispensing requirements outlined by provincial regulatory bodies.

The minimum space requirements for managed alcohol provision include:



- A dedicated and secure area for storing alcohol and other medications
- Private dedicated space for conversation with service providers and support staff (e.g., for medical assessments, psychosocial interventions, client progress reviews)
- Safe space to consume alcohol

Where possible, communal space should be allocated for alcohol consumption, socializing, and conducting program activities. The lack of a safe space to consume alcohol has been identified by individuals with AUD who experience homelessness as a key factor exposing them to risks such as accidents, assault, and arrest due to intoxication in public spaces.[53] Conversely, the provision of a safe communal space has been shown to improve social connections, facilitate the regulation of alcohol use patterns, and improve well-being.[64,67] A private space to sleep is also commonly identified as a necessity by MAP participants; where possible, private bedrooms or a personal space should be allocated for the clients of housing-based MAPs. Finally, where space and licensing options are available, an outdoor space within the facility (e.g., courtyard, a portion of the parking space) may be allocated for socializing and alcohol consumption as well.

Space design considerations

The ability of staff to monitor clients and ensure safety and comfort should be considered when mapping the flow of clients through the MAP space. A Crime Prevention Through Environmental Design (CPTED) scan can be an effective measure to ensure that the space design is safe for clients and staff without being unnecessarily intrusive.[m] EQUIP Health Care also offers a brief tool containing tips for Creating a Welcoming Environment which may be useful for design and use of space. Program developers should incorporate client collaboration and input into the space design process to the extent possible.

Measures to ensure safety and accessibility for clients with mobility challenges or limited sight should also be considered in space design. These may include installing rails, shower seats, and non-slip surfaces.

If the MAP is embedded within services where other clients are served, including those who may not be consuming alcohol or those who may be trying to abstain

m The CPTED tool is not specific to care settings. This is a free tool developed for a wide range of services (e.g., restaurants, entertainment venues, clinics). The tool focuses on general practicality and safety considerations such as appropriate lighting and sightlines, appropriate flow to avoid feelings of entrapment and isolation, and sufficient signage.

from alcohol, space planning should include consideration for clients who do not receive managed alcohol. For example, a dedicated private space may be designated for MAP clients to consume alcohol. Alternatively, in some housing-based settings, clients may be asked to consume alcohol in their rooms.

4.5 Alcohol Storage and Security

For settings that have a secure space, alcohol can be stored on-site (e.g., locked office or closet). For settings that do not have storage capabilities or staff who are available to administer alcohol (e.g., encampments), an off-site storage location is needed and delivery services should be considered, where resources are available.

Programs should develop inventory management forms and protocols. For example, each dose dispensation should be recorded and signed by both client and staff member, whether a dose is administered on-site or dispensed for take-away consumption. A sample inventory control form is provided in Appendix 6.

4.6 Staff Qualifications and Training

This section provides an overview of suggested qualifications for clinical and non-clinical MAP staff. It should be noted that, while the lists provided below may be used to guide staffing and training procedures, they should not be viewed as fixed requirements for every MAP model. Staffing structure and the scope of required skills are determined based on each program's model of service, community needs, and resources. For example, many of the clinical qualifications outlined in this section may not be applicable in the context of community-based peer-led programs.

General Qualifications for All Staff

All MAP staff members should be competent in:

- Trauma- and violence-informed practice including strengths-based approaches (see Trauma- and Violence-Informed Care)
- Cultural safety and humility
- Harm reduction-oriented care
- All other Principles of Care

Depending on the specific role, staff should be familiar with the following:

- Goals of the program
- Protocols and policies (e.g., responding to intoxication, disruptive behavior, or deviations from client agreement; missed appointments)
- Strategies to prevent and mitigate stigma[n]
- The full range of treatment options along the continuum of AUD care[o] and local community programs and resources
- Current evidence relating to harm reduction philosophy, practices, and client education
- First aid and emergency response, including overdose response and management of substance-related psychosis
- Non-violent crisis intervention and conflict resolution

n Toward the Heart has multiple resources on reducing stigma, including training modules and guidance on respectful language.

o In addition to training opportunities available in each jurisdiction, the BC Centre on Substance Use provides general addiction care training, including modules on treating alcohol use disorder, client-centred care, cultural competency, and working with 2S/LGBTQ+ communities through its Addiction Care and Treatment Online Certificate, which is free and open to individuals across Canada.

In addition to educational requirements (if relevant) and general qualifications, the following are suggested qualifications for various staff types:

Clinical Staff

- An understanding of the biopsychosocial model of addiction and the factors that impact addiction
- Previous experience in substance use care
- Screening, diagnosis, and assessments for AUD
- Awareness of the prevalence of co-morbid health issues with AUD
- Previous experience in working with people who are experiencing homelessness or marginalization (i.e., active listening, respect, and compassion in their approach)
- Motivational interviewing
- Cognitive behavioral therapy and/or psychosocial rehabilitation
- Case management skills (on-site nursing staff)

Non-clinician Support Staff

- Previous experience in substance use care
- Identification and assessment of alcohol withdrawal symptoms
- Identification and management of harms related to the use of other substances (e.g., overdose, withdrawal, psychosis)
- Motivational interviewing
- Ability to make appropriate referrals for other psychosocial interventions
- Previous experience working with people experiencing homelessness and/or other marginalization
- Case management skills
- Ability to conduct a psychosocial assessment with an addiction focus (e.g., history of use, history of treatment, determining readiness for change, risk assessments)

Peer Support Staff

- Conduct orientations for new clients
- Provide harm reduction education, including information on safer drinking strategies
- Inform clients of relevant services, supports, and activities within the MAP and the broader community, and help clients navigate the system
- Provide clients with information and support during the managed alcohol planning process, where appropriate
- Advocate for clients and counteract client–provider power imbalance, particularly in clinician-led models, by ensuring that the client's input in care planning is heard and appropriately prioritized
- Help resolve interpersonal conflicts among clients
- Help maintain a safe, respectful, and inclusive environment

For individuals interested in further training and certification, Peer Support Accreditation and Certification Canada (PSACC) provides National Peer Support Certification and Peer Support Mentor Certification. Also, the Street Degree course is designed to help peer support workers develop skills in a range of areas including overdose response, harm reduction approaches, management of conflict and extreme situations, cultural safety, and trans inclusivity. Additionally, the Canadian Mental Health Association has developed a training Resource for Peer-led Wellness Programs in Indigenous Communities, which is intended to equip Indigenous peers with information and strategies to support wellness in their communities. Finally, the Peer2Peer project by Toward the Heart offers a range of resources for peer worker training and implementation of peer-led support services.

Resources guiding peer employment

Peer workers should be understood as equal members of the MAP staff, who should be compensated fairly. There are several documents outlining best practice and payment standards for employing people with lived and living experience. While these documents were developed in the context of services for people who use opioids, they are relevant to peer engagement for MAPs. These resources include:

- A Peer Engagement Principles and Best Practices document and Peer Payment Standards from the BC Centre for Disease Control
- Best Practice Manual for Supporting Peers/ Experiential Workers in Overdose Response Settings by the Peer2Peer research team supported by the BC Centre for Disease Control and the Canadian Institute for Substance Use Research
- The Community Research Report: Peer Work lists recommendations based on the findings of a study on peer work in BC
- Meaningful Engagement, and Meaningful Results: Engagement and Consultation Road Map from the Provincial Peer-training Project
- Harm Reduction at Work: A Guide for Organizations Employing People Who Use Drugs from Open Society Foundations
- Best Practices in Peer Support from Addictions & Mental Health Ontario

Programs employing peer workers may consider instituting mentoring and/ or other support mechanisms for peer workers, to support their wellness and self-defined progress.

4.7 Distribution of Roles and Responsibilities

Each MAP should determine what level of staffing is appropriate, depending on setting, capacity, model, and specific client needs. There is broad variation among MAPs in terms of the distribution of staff roles and responsibilities; this is largely since, unlike illicit drugs, handling and dispensing alcohol is not restricted to prescribers or strictly contingent on medical oversight. However, each MAP must clearly define staffing and workflow to ensure appropriate training and consistent and coordinated service delivery.

The development of the MAP staffing model should include the designation of appropriate staff members for the basic MAP responsibilities outlined below.

4.7.i Client Orientation and Education

Prior to admission, individuals identified as likely to benefit from managed alcohol should go through an admission process that involves informed consent and an orientation to ensure that the program's goals, regulations, and other requirements are fully understood and meet the needs of the client and the program.

Ideally, peer workers should be tasked with this responsibility. Many MAP clients are not engaged in the health care system and may be more comfortable with peer orientation; these clients may also benefit from peer support and advocacy in navigating the continuum of AUD care and related supports.

Peers should also be included in the education of potential clients and the larger community. Working with peers to create clear messaging about the MAP will help ensure that new clients have realistic expectations for the treatment.

4.7.ii Initial Assessment and Managed Alcohol Provision Planning

Where possible, initial screening and assessment should be conducted by clinicians (nurse, nurse practitioner, or physician). In community-led models, support staff with appropriate training may conduct assessment with supervision and support from clinicians.

Individualized managed alcohol plans are typically devised by clinical staff in the clinician-led models with client input, while in community-led models they are generally developed through collaboration between the client and non-clinical staff. Regardless of the designated staff responsible for care planning, close collaboration with the client is advised.

4.7.iii Alcohol Storage

Alcohol storage can be managed by any staff member trained for secure storage of alcohol and inventory control (e.g., housing support staff, reception staff).

A sample inventory control form is provided in Appendix 6.

4.7.iv Alcohol Dispensation

Staff members (e.g., housing support staff) tasked with alcohol dispensation should be trained to conduct wellness checks and screen clients for intoxication and withdrawal symptoms prior to, and at the time of alcohol delivery or dispensation, so that health care staff are notified and dose adjustments or appropriate interventions can be considered.

Staff members should be instructed to discuss pre-dose assessment and alcohol dispensation procedures with the client during managed alcohol planning; clients should be assured that withholding a scheduled dose is not intended as a punitive action and is intended purely to avoid the harms of alcohol toxicity and ensure client safety.

Sample pre-dose intoxication assessment instructions and related forms are provided in Appendix 7.

4.7.v Financial Management

In MAPs that offer clients financial management services, case managers or other non-clinical support staff may receive training to provide this service. However, if resources allow, it may be beneficial to allocate a dedicated staff member for financial management; some MAP providers have found that this may enable care and support staff to develop therapeutic relationships with clients without the interference of financial concerns. A number of MAPs refer clients to partnering third party financial management services; this can be facilitated by case managers or other designated non-clinical staff.

4.8 Funding and Alcohol Procurement

Funding considerations will vary by service model and setting. Costs will be based on number of clients served, number and types of staff required, and volume of alcohol required monthly.

Potential funding sources may include:

- Funds from health authorities
- Provincial or municipal government funding
- Client contributions to supplement costs (e.g., signing over agreed-upon portions of social assistance or disability income)
- Donations from local organizations or alcohol suppliers

The mechanisms for obtaining and purchasing alcohol are varied. Health authorities or organizations interested in offering managed alcohol should consider the following:

- Source of alcohol
  - Liquor stores (bulk discount possible)
  - Local brewery or winery (bulk discount or lower cost product possible)
  - Donated alcohol
  - Brewing co-operative within the program
  - Pharmacy
    - In some jurisdictions (e.g., British Columbia) alcoholic beverages are included in the provincial formulary and can be dispensed by pharmacies in hospitals or other inpatient settings. At this time there is no mechanism for procurement via community pharmacies

An additional consideration for alcohol procurement and dispensation is to determine whether a liquor licence is required. Depending on the jurisdiction, liquor licencing requirements may pose limitations to alcohol procurement and dispensation (e.g., location and hours of dispensation, training requirements for serving alcohol).

5 Care Planning

Each managed alcohol service should put in place protocols for individualized client care planning. This section provides general guidance for the establishment of protocols for assessment of client eligibility, intake procedures and client orientation, individualized alcohol management plan development, continuity of care, development of referral pathways to facilitate treatment or setting transitions, and monitoring procedures.

5.1 Eligibility

Each managed alcohol service should determine eligibility criteria based on a range of factors including program setting, model(s) of service delivery, program goals, capacity, resources, and the needs of the community in which the program is situated.

In addition to general formal eligibility considerations, each program should develop a protocol for individualized eligibility assessment with input from potential clients. A brief overview of eligibility considerations used in existing MAPs is provided below.

Alcohol-related eligibility criteria

Generally, the minimum eligibility criteria for accessing managed alcohol include:

- Severe active AUD[p]
  and/or
  Assessed high risk of withdrawal symptoms and other serious alcohol-related harms due to confirmed heavy daily alcohol use
- Legal drinking age

Other alcohol-related eligibility considerations include:

- Non-beverage alcohol use
- History of public intoxication
- Ineligibility for housing programs as a result of alcohol use
- Continued alcohol use or alcohol craving during evidence-based AUD treatment
- Reduced ability to address health care or social support needs due to alcohol use (this may manifest in frequent emergency department visits or hospitalizations, or other negative outcomes such as arrests and incarceration)
- Frequent use of emergency departments

Housing status and additional health and psychosocial needs

Managed alcohol services operating in housing-based facilities (e.g., shelters, supportive housing services) typically include unstable housing and homelessness among their eligibility criteria. Additionally, MAPs operating within facilities that provide specialized services for specific populations may incorporate eligibility criteria that correspond with the population served by the facility.

p Formal diagnosis of AUD can only be made by a physician or a nurse practitioner; many eligible candidates at high risk of severe alcohol-related harms may not have received a formal AUD diagnosis.

Examples include:

- Seniors
- Women only/men only
- Individuals belonging to 2S/LGBTQ+ communities
- Individuals with complex mental health care needs
- Individuals requiring disability services
- Individuals requiring palliative care

5.2 Screening and Assessment

Each program should develop screening and assessment procedures to determine client eligibility, assess harm reduction and referral needs, and inform the development of individualized managed alcohol plans. Results of the initial screening and assessment should be documented and referred to as a benchmark for ongoing monitoring and assessment of program benefit for the client. The assessment of potential MAP clients should generally include the following areas:

- Active alcohol use (i.e., screening for AUD, establishing quantity and frequency of alcohol use, identifying non-beverage alcohol use)
- Active use of other substances (i.e., establishing type of substance, quantity used, frequency of use)
- Substance use and treatment history
- Any urgent or acute medical needs
- Comorbid mental and physical conditions and related needs
- Prescribed medication(s)
- Current access to health care services
- Housing and employment status
- Client-identified recovery goals

A sample clinical client assessment form is provided in Appendix 8.

Table 2. Examples of validated screening and assessment tools to facilitate the assessment of alcohol use, alcohol withdrawal symptoms, and related harms

Tool	Purpose
Alcohol Use Disorders Identification Test (AUDIT) tool [201]	Screening for the identification of AUD
Prediction of Alcohol Withdrawal Severity Scale (PAWSS)[36]	Estimating risk of severe complications of withdrawal
Severity of Alcohol Dependence Questionnaire (SADQ)[202]	Measuring severity of AUD; can be self-administered and can be used in both clinical and non-clinical settings
Clinical Institute Withdrawal Assessment for Alcohol-Revised (CIWA-Ar) tool[203]	Point-of-care assessment of withdrawal symptoms

Alcohol use screening and assessment tools are provided in Appendix 9.

A comprehensive review of validated AUD screening and risk assessment tools is provided in the CRISM AUD Guideline.

5.3 Intake Procedures and Harm Reduction Education

As with other interventions, clients' ability to understand and consent to program requirements is a key prerequisite for program entry. Prior to receiving their initial managed alcohol dose, individuals identified as likely to benefit from a MAP should go through an admission process that involves informed consent and orientation to ensure program regulations and other requirements are fully understood and align with their wellness goals. Client orientation is an opportunity to educate clients on strategies for safer drinking and discuss the risks associated with drinking outside the program.

It should be noted that literature pertaining to comparable low-barrier programs for individuals with substance use disorders has cited lengthy and cumbersome intake processes as a barrier to accessing care, highlighting the importance of rapid access to medication to ensure engagement in the intervention.[204-206] Available evaluations of low-barrier programs for illicit substance use disorders have consistently highlighted the importance of incorporating streamlined and concise intake protocols to enhance program engagement.[204,205] A peer-led enrollment process is recommended to assist with simplifying and expediting process in a safe and welcoming environment.

Where appropriate, an agreement on a trial participation period may be considered to give service providers the opportunity to conduct sufficient assessment, and to allow clients and providers to determine if the program and setting is the best fit for the client. In some programs, the trial period may involve a close monitoring phase during which providers are able to ascertain the client's specific needs and develop a tailored managed alcohol plan.

5.4 Individual Alcohol Management Plans

Individualized alcohol management plans are typically devised by clinical staff in the clinician-led models with client input, while in community-led models they are generally developed through collaboration between the client and non-clinician staff.

Regardless of service model, discussion with the client and shared decision-making is highly recommended. Managed alcohol is often provided outside

of medical or clinical settings and a prescription is not required. Clinician-led programs offering managed alcohol may decide to develop processes that include written orders or medical directives[q] (see example in Appendix 10).

Typical elements of alcohol management plans include:

- Discussing harm reduction and client goals
- Determining dose and type of alcohol[r]
- Determining frequency of alcohol provision
- Determining frequency of monitoring and wellness checks
- Providing education on harm reduction and safer drinking
- Discussing how to proceed if the client is intoxicated at pre-dose assessment (see Appendix 7 for further information)
- Reviewing the client agreement

Individually tailored alcohol management planning should be understood as an iterative process; alcohol management plans should be revisited regularly in collaboration with the client. When clients who are stable on MAPs and express a desire to reduce or discontinue alcohol use, service providers may discuss transitioning to withdrawal management and AUD pharmacotherapy in reference to client goals and preferences.

q In some clinician-led models, orders may be used for documentation.

r Note: alcohol amount, frequency, and type may need to be adjusted depending on client's goals and whether withdrawal symptoms emerge or client becomes over-intoxicated. If client wishes to reduce drinking, provide advice on safe and gradual tapering (e.g., by one drink per day) or taking breaks.

Any adjustments to the alcohol management plan, due to withdrawal, over-intoxication, or changes in goals, should be made collaboratively with the client and should be documented. Clients should be supported to develop self-management skills, including counting and pacing their drinks, to avoid binging or outside drinking.

See Appendix 4 for a sample alcohol management plan.

5.5 Intervention Duration and Transitions Across the Continuum of AUD Care

Managed alcohol provision should be viewed as an open-ended harm reduction intervention and should only be discontinued if the client decides to transition away from managed alcohol provision or if the client's participation in the MAP poses significant safety concerns that cannot be addressed in any other way (e.g., violent behaviour to staff or other clients that cannot be resolved). Service should not be discontinued without discussion with the client within a shared decision-making framework and in the interest of the client's safety.

5.5.i Referral Pathways to Withdrawal Management and AUD Treatment

All MAPs should incorporate client education and information on the continuum of AUD treatment and implement functioning referral pathways to withdrawal management, ongoing AUD treatment, and ongoing medical and psychosocial services for eligible and interested clients.

Withdrawal management for MAP clients taking a break from drinking

It is important for MAPs to have close connections and functioning referral pathways with withdrawal management services. Managed alcohol clients who choose to transition to AUD treatment will likely need to undergo withdrawal management. Additionally, MAP clients may choose to undergo withdrawal management to take a break from drinking (i.e., "liver holiday") and moderate their drinking patterns. Based on anecdotal reports from MAP clients, delays in access

to withdrawal management services have deterred some clients from proceeding with their plans to reduce or discontinue alcohol use. To address this gap, MAP implementation planning should include direct referral pathways to detoxification facilities or, where possible and appropriate, co-locating managed alcohol and withdrawal management services or direct admission from hospital or hospital-based MAPS for clients who choose this option.

5.5.ii Continuity of Care

Community-based MAPs should also have protocols in place to ensure continuity of care and avoidance of withdrawal symptoms in specific circumstances such as travel, hospitalization, or incarceration. This may include protocols to contact the most responsible provider at the hospital or correctional facility to inform them that the patient has been receiving managed alcohol and is at high risk of experiencing severe complications of alcohol withdrawal.

5.6 Monitoring

All MAPs should have protocols in place for regular monitoring to ensure client safety and evaluate clients' progress toward collaboratively-developed wellness goals. As described below, regular monitoring of MAP clients can be categorized into two levels: 1) brief wellness checks and intoxication assessment prior to each dispensation; and 2) scheduled assessment visits to assess clients' progress (e.g., weekly or biweekly meetings).

Prior to Dose Dispensation

To avoid over- or under-dosing, and to minimize the risks associated with the use of outside alcohol or other CNS depressants, MAPs should have procedures in place to conduct wellness checks and screen for intoxication or withdrawal symptoms prior to each dose dispensation.[64,125] If symptoms of intoxication are present, the alcohol dose may be delayed or reduced in accordance with program policies and protocols to ensure client safety. It should be noted that recurring detection of intoxication and outside drinking may be a sign that the current alcohol management plan is not adequately meeting the client's needs and should be revised. The presence of withdrawal symptoms may also indicate that the current dosage is insufficient and should be revised.

Sample point-of-care intoxication assessment forms are provided in Appendix 7.

Regularly Scheduled Assessments

- Assessing client-specific health outcomes (e.g., decreased emergency department usage, decreased hospitalization, engagement in primary care)
    - Point-of-care assessments may periodically include clinical tests, such as liver function tests, to monitor progress
- Assessing psychosocial outcomes (e.g., housing stability, decreased contact with criminal justice system, re-connection with family and friends)
- Discussing any incidents of intoxication, non-beverage alcohol use, and outside drinking since last assessment
- Revisiting client-identified goals and collaborative review of the client's wellness needs
- Reviewing safer drinking strategies

Where appropriate, additional wellness checks should be scheduled during sleeping hours to ensure safety; this is particularly recommended for new admissions, who are at higher risk of experiencing withdrawal or overdose.

It may be helpful for providers and staff to meet periodically (e.g., weekly) to discuss clients' progress and challenges and share advice and support.

6 Evaluation

Managed alcohol programs should consider embedding evaluation into planning activities as early as possible. Evaluation of MAPs should be understood as a priority to inform ongoing planning, policy, and practice, with recognition of the potential of collaboration to generate a national data set.

A logic model may be useful when planning evaluation activities. The University of Calgary's *Managed Alcohol Supports Toolkit* contains guidance on MAP evaluation, including an example of a MAP logic model.

The CMAPS team has developed dedicated evaluation materials that can be accessed through the contact information provided on the CMAPS website.

Appendices

Appendix 1 Guidance Document Development Process

Funding

The development of this guidance document was supported by funding from the Health Canada Substance Use and Addictions Program and by in-kind contributions from the BCCSU and the Canadian institute of Substance Use Research (CISUR) at the University of Victoria.

Committee Membership

Steering committee

In January 2021, the BCCSU assembled a National MAPs Steering Committee in partnership with CISUR for the purpose of defining the scope of the MAPs National Operational Guidance, assembling a nationally representative guidance development committee, and coordinating the guidance development process. The Steering Committee was composed of representatives from the BCCSU and CISUR leadership; project management staff; a medical writer; and three committee chairs with clinical, operational, and academic expertise in the establishment, operation, and evaluation of MAPs.

MAPs Guidance Committee

Through a process of nomination and recruitment by steering committee members, an interdisciplinary Guidance Committee of 42 experts was assembled in May 2021. The Guidance Committee includes representatives from all provinces and territories as well as a wide range of relevant expertise. Specifically, the Committee is composed of clinicians with addiction medicine expertise, policy makers, researchers, MAPs service providers, and people with lived and living experience.

In the course of content development, the Guidance Committee oversaw the literature review process and helped supplement available evidence with operational information through expert consensus.

Literature Search and Review

The Guidance Development Committee used a structured literature search and review strategy to establish the scientific basis for content development. An information specialist was engaged to perform the literature search using a peer-reviewed search strategy for the following databases: Medline, Embase, and Cochrane Database of Systematic Reviews. The search strategy targeted articles published in English between 1990 and February 2021. A separate grey literature search was also conducted by the information specialist with a focus on implementation, operation, an evaluation information relating to existing MAPs in Canadian and international jurisdictions.

The resulting titles and abstracts were independently screened by two medical writers using the inclusion/exclusion criteria established by the Steering Committee. All studies that met the inclusion criteria were summarised and presented as a basis for operational considerations provided in this text (See Current State of Knowledge on Managed Alcohol Programs).

Content Development Process

Between May 2021 and September 2022, the Guidance Committee conferred over email and three scheduled video conferences to discuss and reach consensus on the content of the guidance document. At the first committee meeting, members reviewed literature summaries prepared through scoping activities conducted by the steering committee and provisionally approved the general scope and outline of the guidance document. In subsequent email communications, Guidance Committee members provided feedback on iterative drafts of the guidance document prepared and circulated by the medical writer. Contradicting feedback and contested content were discussed in the course of committee video conferences which were scheduled at the end of each draft

review round in order to build consensus and provide the medical writer with instructions for the next draft.

External review and stakeholder consultation

A Guidance Committee-approved draft of the guidance document was circulated among a panel of national and international experts identified by the Steering Committee as well as a panel of reviewers with lived and living experience of substance use. Feedback from these panels was compiled and implemented in the final draft of the document.

Appendix 2 Case Study: Sudbury, Ontario

This section presents a brief case study of the development trajectory of the MAP in Sudbury, Ontario, which was initially launched as a day program in 2015, and transitioned into a permanent housing model in 2018.[200] To provide context and support the selection of MAP model(s), a brief description of both of these models, a summary of their challenges and successes are provided below in reference to CMAPS evaluation results.

Description of the Day Program (2015-2018)

In 2015 the Canadian Mental Health Association of Sudbury/Manitoulin launched the Harm Reduction Home (HRH) Day Program in Sudbury, Ontario, Canada. The HRH Day Program provided clients with access to managed alcohol on a daily basis during daily operational hours (8am–10pm from April to October and 8am–8pm from November to April).[200]

- **Client characteristics:** Program admission criteria included adults aged 19 years or older with severe alcohol use who were experiencing homelessness or were at risk of experiencing homelessness, and who faced barriers to accessing health and social services due to alcohol use.
- **Setting:** The day program was located in a former police station in the downtown core of Sudbury, in close proximity to mental health and addiction services, emergency shelters, food banks, crisis intervention services, the main bus terminal, government buildings, and a liquor board store. The MAP had the capacity to serve 8 clients.
- **Staffing:** The staff positions included the program manager, lead physician (off-site addiction specialist), nursing staff, case manager, recreational therapist, and residential workers. During the operating hours of the program there were a minimum of two staff on site.
- **Managed alcohol plan and administration policies:** The physician conducted an overall assessment of each new client entering the program while the nursing staff and non-clinical staff were responsible for administration of alcohol doses. Clients typically received a standard drink of wine each hour as per their individualized schedule. Clients were assessed for intoxication

for 20 minutes prior to receiving their dose, and doses were adjusted as required based on the clinical assessment. Drinking outside the program was discouraged and no outside alcohol was permitted inside the program. Both alcohol dispensed through the program and alcohol consumed outside the program (based on client report and intoxication assessment) was documented in the alcohol administration charts completed by MAP staff and monitored by the staff and physician.

- **Additional services and supports:** Additional services and amenities included light meals as there were minimal kitchen facilities for meal preparation, and a multifunctional communal space. Staff also facilitated connection to housing, financial, legal, primary care, and mental health supports.

Day Program Evaluation Findings

In 2016, CMAPs conducted a small scale mixed methods study (8 MAP participants; 16 controls) involving in-depth interviews and surveys to evaluate the impact of the Sudbury MAP on 1) clients' alcohol consumption patterns, including non-beverage alcohol use, and alcohol-related harms (e.g., liver function issues, seizures, assaults, and police encounters); 2) housing stability and satisfaction; and 3) access to health and social services.[200]

- **Alcohol consumption patterns, including non-beverage alcohol use:** On balance, this evaluation showed no significant evidence of a reduction in beverage or non-beverage alcohol use. Medical test results showed persisting or, in some cases, worsening liver function.[200] During interviews, staff, other community partners, and MAP participants attributed persisting alcohol use and alcohol-related harms to challenges associated with a day-program model; findings suggested that, during closing hours, clients consumed significant amounts of alcohol, including non-beverage alcohol, in potentially unsafe settings where they were exposed to assault, arrest, and overdose. [200]

  Additionally, it was suggested that the sporadic attendance of day program clients hindered the staff's ability to observe and assess clients' needs and adjust managed alcohol plans and additional care services accordingly. Clients would typically arrive either in withdrawal or intoxicated, which would make it difficult to have comprehensive discussions to determine appropriate dosing.[200]

- **Quality of life related to housing stability:** Staff and MAP participants considered connection to housing services as a key aspect of the program. Quantitative findings indicated that fewer MAP participants (37.5%) reported current homelessness compared to controls (62.5%).[200] Although these results indicate some success in improving housing stability, MAP participants' satisfaction with their housing was similar to that of controls. Suitable housing options were often far from the MAP, which presented access issues. In particular, clients reported facing the risk of severe withdrawal in the morning hours due to the long commute to the MAP site.[200] Participants who remained unhoused also highlighted that the lack of housing meant they would be forced to return to the streets when the program closed, and frequently consumed alcohol, including non-beverage, as a way to cope.
- **Access to health care and psychosocial supports:** There was qualitative evidence indicating that some MAP participants experienced improved quality of life, better relationships with health care providers and easier access to health services as result of being in the MAP. However, there were recurring concerns regarding access to supports to help participants manage withdrawal symptoms and other harms related to intoxication afterhours, particularly among those who remained unhoused. [200]

Implementation of a housing-based model and observed impact

In view of the finding that limitations in the effectiveness of the MAP were largely attributable to the lack of integrated housing, the primary recommendation of the Sudbury MAP evaluation report was to transition the program into a housing-based model.[200] The on-site accommodation of clients would improve housing stability and safety while enabling appropriate needs assessments and consistent dosing and monitoring.

The housing-based program opened in a temporary location in April 2018 and moved to a permanent location in July 2020. The temporary facility housed all 8 clients. The location of the program was outside of the downtown area, which reduced exposure to triggers and minimized access to outside alcohol or illicit substances. The permanent location was relocated back in the downtown core in the same building as the day program, following significant renovations to meet the needs of a housing-based MAP.

Clients can receive hourly alcohol doses for up to 14 hours, with additional doses available as needed for new clients who experience withdrawal symptoms overnight. The facility is staffed 24 hours a day, with nursing support available 15 hours a day. This has enabled better medication management, adequately regulated alcohol consumption, and consistent monitoring of physical and psychological health concerns.

Whereas in the day program sporadic client attendance hindered the MAP team's ability to develop comprehensive care plans based on client's needs and goals, consistent contact with MAP providers and staff in the housing-based model enables clients and staff to identify care needs and set goals towards enhanced stability and well-being. To assess the needs of new clients and the suitability of the MAP for meeting those needs, a trial period protocol was developed, enabling staff to:

1. Complete screening and assessment tools
2. Monitor for withdrawal symptoms and adjust managed alcohol plan
3. Assess physical and psychological needs
4. Identify triggers for alcohol usage and identify alternative coping strategies
5. Establish a daily routine in the program
6. Identify client goals and set incremental and attainable milestones to achieve those goals (e.g., basic hygiene routine, 20% reduction in non-beverage alcohol use weekly)

A new managed alcohol initiation and stabilization protocol was also developed, whereby new clients underwent a two-week stabilization period with increased physician oversight. In this period, the physician monitors the standard managed alcohol pour order (i.e., one 7oz wine at 7:30am and at 21:30, and hourly 5 oz drinks in between) and closely monitors the client, making adjustment to address withdrawal symptoms or over-intoxication. Clients undergo intoxication assessment before each dose; doses may be reduced or held to ensure safety if excessive intoxication is observed.

The housing-based format also afforded time and space to implement peer-led

educational and cultural activities to enhance skills and build community connections. The housing facility has fostered a sense of family and ownership among clients. Clients take on daily responsibilities, which help enhance self-efficacy and improve well-being. Clients are also supportive of each other's progress.

Since 2018, the housing-based model has increasingly been able to connect clients with volunteer and work opportunities, assist with school re-integration, facilitate family connections, support graduation to independent living, and increase quality-of-life satisfaction among clients and staff compared to the day program model. The Sudbury experience suggests that housing-based MAPs may be the preferred model for unhoused populations while day models remain important in client engagement and access to supports.

Appendix 3 Financial Management: An Overview of Principles and Process

This document provides a basic overview of voluntary financial management services for MAP clients in reference to the financial management program offered at Individualized Managed Alcohol Program (iMAP), Victoria. Basic principles of financial management are listed in Section A, while Section B provides a brief case study of financial management at iMAP. A sample client financial management consent form is presented in Section C.

Section A. Financial management Principles

- **Client-centered service:** The goal of financial management services is to improve autonomy and quality of life for clients. The consistent promotion of the client's right to choose how they spend and direct their money is critical. Remain mindful that participation in financial management support, and the program as a whole, is **voluntary.**

  The financial management agreement must be revisited and revised with the client periodically to confirm that the client wishes to continue the service, and that the terms of the service continue to align with their needs and preferences.

- **Balancing Client Autonomy and Safety**: When possible, promote the development of skills that lead to financial independence. However, also be mindful of the risk to client safety due to depletion of funds. Discuss the risks associated with over-spending with the client and offer increased financial supports to help mitigate these risks.

- **Staff Safety:** Providers must not engage in power struggles with clients over management of funds; this does not align with the principle of providing a voluntary service to improve safety, autonomy, and quality of life. Any instances of violence or aggression concerning financial management should result in a review to consider termination of financial management agreement. In some cases, it may be useful to allocate a dedicated staff member for financial management to ensure that care and support staff can safely build therapeutic relationships with clients without the interference of financial issues.

Section B. Case study: the IMAP financial management service

Along with individualized alcohol management, Island Health iMAP program offers its clients a range of additional support services which includes voluntary financial management. The clients of iMAP contribute to the program by paying for 50% of the alcohol they consume through the program. The voluntary financial management provides the client with the option to redirect their provincial income assistance cheques to the iMAP account so that their managed alcohol fees can be automatically deducted, and the remainder of their funds be dispensed to them according to their preferred schedule, in order to ensure sufficient funds for their expenses until the next cheque day.

Specifically, clients interested in receiving financial management services can select one or more of the following options:

Program fees only

Client agrees to have their provincial monies directed to iMAP on or soon after their respective cheque day, and receive the remainder of their monthly income in the form of cash or cheque following the deduction of program fees

Program fees + basic expense management (e.g., food)

This option may be offered if there is evidence that the client requires significant support in budgeting for basic needs such as cigarettes, food, and personal hygiene items. This service involves reserving an agreed-upon portion of the client's remaining money after deducting program fees, in order to cover the cost of basic client-identified needs.

Divide remaining monies into 5 weekly cheques

This option enables clients to receive their remaining money in 5 weekly increments to support budgeting while ensuring the client has autonomy in cashing and spending their income. On 4-week cheque months, the client could have the option of having the fifth cheque at any time.

Program fee + full financial management

This option is only offered if client reports and available collateral information suggests that the client's difficulty in managing their money has led to risks including significant increase in binge drinking or other drug use, increased risk of accidents or suicidality, or risk to others.

To support the client in selecting the appropriate option, the provider conducts an assessment of income and financial needs in collaboration with the client at intake. In addition to accounting for all current sources of income and necessary expenses, the provider considers the client's psychiatric profile, cognitive status, and any available collateral information (e.g., payment records).

After explaining the options to the client, the client is invited to select their financial management options and sign the consent forms (program consent form as well as consent forms from the provincial ministry supplying the income for disclosure of information and service authorization). Clients who opt not to receive financial management will be offered options to pay for their iMAP alcohol fees with cash or cheque monthly.

Financial management service staff are given specific instructions for conducting the initial assessment, processing service authorization forms, deducting program fees and making refunds if client's alcohol consumption or other expenses were below calculated amounts, and collecting, dispensing, and storing cash.

To date, the financial planning service at iMAP has been well-received by clients, and staff have noted a number of benefits including decreased incidence of conflicts relating to program fees, decreased number of departures from program due to owed fees, and improved collaboration with program staff focused on financial budgeting that allows for necessities such as groceries. A number of service clients have expressed gratitude for their increasing financial independence as a result of financial management support.

Section C. Sample financial management consent form

The sample consent form is provided by iMAP in Victoria, BC. Required information may vary in each province or territory.

This information is collected by ICMT under s. 26 (c) of the Freedom of Information and Protection of Privacy Act and will be used to provide ICMT services.

Consent to use and disclosure of personal information to the ministry of social development and poverty reduction

I, _____ _____ _____
(last name) *(first)* *(initial)*

Date of Birth: _____ _____ _____
(year) *(month)* *(day)*

hereby authorize:

The Intensive Case Management (ICM) Team to contact the Ministry of Social Development and Poverty Reduction to **disclose the following information, to provide services to me during my participation in the iMAP Program:**

Information related to my approval, and request, to authorize the administration of my Income Assistance or PWD support monies in care of the **"ICM Team"** at 713 Johnson St.

I agree to send the following on a monthly basis to the "ICM Team":

☐ My iMAP program fees of _____.

☐ The amount of _____for cigarettes or food etc.

☐ Divide my remaining monies into 5 weekly cheques.

☐ All of my support monies.

I have consented to this plan for the purposes of managing my finances, securing housing, and maintaining my wellbeing in the community.

Upon voluntary or involuntary discharge from ICMT/iMAP program, consent with MSDPR will be revoked, and the remaining funds will be prorated and returned to client

Client's signature:_____

Witness signature:_____ Date: _____

Appendix 4 Sample Client Alcohol Management Plan and Agreement

Client Information

Name:	Phone number:
Date of birth:	PHN:

Client Identified Goals

☐ _____

☐ _____

☐ _____

☐ _____

Note: If client indicates reduced drinking, AUD treatment, or withdrawal management as a goal, client should be connected to a clinician who specializes in treating substance use disorders.

Alcohol Management Plan

Beverage Type: Wine Dosage[s]: _____	Total Daily Dose: _____
Beverage Type: Beer Dosage: _____	
Beverage Type: Other (_____) Dosage: _____	

Sample drinking schedule: 1 drink every _____ hours

Frequency of delivery to client (e.g., daily at 9 am): _____

Plan if client is in withdrawal or is out of alcohol: _____

_____

Schedule of routine primary care check-up (e.g., weekly): _____

s Enter planned dosage for each type of beverage in number of standard drinks. One standard drink is 1.5 oz vodka, 355 ml can of 5% beer, or 5 oz 12% wine

☐ Safer drinking education provided

☐ Pharmacotherapy options discussed, where feasible

Finances (If Applicable)

Client contribution: _____

Money management plan: _____

_____

Comments

Client Agreement

1. **I agree to receive managed alcohol**, as outlined above. This includes the types and amounts of alcohol and the schedule for when I will receive the alcohol.
2. Before receiving alcohol, the staff will do a **wellness check** to see if I have signs of over-intoxication.
3. I understand that **I will not receive alcohol if I am over-intoxicated** at the time of delivery.
4. I agree to **not access other MAPs or seek additional sources of alcohol** outside of the MAP. If I have concerns about my dosage, I will discuss with the program provider. I agree not to share my alcohol with others.
5. I can **request help from the staff** if I need help with food, medications, communication with family, etc.
6. The staff and I will do a **regular check-in on my health**, my alcohol consumption, and whether we need to adjust the plan.

☐ It is ok to contact me to discuss future research on managed alcohol

☐ I do not want my administrative records to be used for evaluation purposes

Client Name: _____ Client Signature: _____

Appendix 5 Example Client Bill of Rights

The following table provides an example of items that may be included in a client bill of rights. This form may be adapted by each MAP in collaboration with clients and in reference to model(s) of care employed.

Respectful Care

You have the right to be treated with compassion and respect and to receive care in a manner that is respectful of your dignity, independence, and self-determination.

You have the right to have your identity (for example, gender identity, culture) respected.

Information

You have the right to be informed about the risks and benefits of receiving managed alcohol, and to receive information on other treatment options and support services upon intake.

Privacy

You have the right to privacy. Case discussion, consultation, examination, and treatment should be conducted in a way that protects your and every client's privacy.

You have the right to expect confidentiality. Your MAP providers will maintain confidentiality of your care and medical records except in cases required by law (for example, suspected abuse of a minor).

Quality of Care

You have the right to receive, or be referred to, high quality evidence-based medical care.

You have the right to continuity of care. In case of travel, transition to another location, hospitalization, or incarceration, you have the right to continued care for the management of alcohol withdrawal symptoms and other alcohol-related harms, although you may not receive MAP due to limitations in availability.

Involvement in Care

You have the right to work with your MAP provider and care team to create wellness goals for yourself and to receive care or referrals to meet those goals.

You have the right to involve your family and social circle (e.g., romantic partners, close friends, and other people of significance) in your care when appropriate. You also have the right to exclude your family and social circle from your care.

Complaints

You have the right to make a complaint to the appropriate authority about any violation of your rights. [insert contact information for regulatory bodies and any other complaint mechanisms]

Appendix 6 Alcohol Inventory Control

Below is a sample alcohol inventory control form adapted from the BC Interior Health and Providence Health Care

				Dose Amount	Vodka 375ml	Vodka 750ml	Beer 341-355ml (1can)	Wine 2L	Wastage	
		BASELINE INVENTORY								
Date	Time	Client Name	Prescriber							Signature
		BALANCE								

Appendix 7 Sample Pre-dose Intoxication Assessment Forms

This appendix provides two intoxication assessment tools along with considerations for selecting the appropriate pre-dose assessment and dose dispensation approach. The assessment tool samples presented below facilitate two different approaches to managed alcohol dispensation.

- Assessment Tool 1 facilitates a binary approach in which a client who displays any of the listed symptoms of intoxication will not receive their scheduled alcohol dose until reassessment in the next hour
- Assessment Tool 2 presents a gradient for intoxication assessment, in which moderately intoxicated clients are offered a reduced dose while evidence of severe intoxication prompts withholding of the dose until the next assessment

Consideration for selecting pre-dose assessment and alcohol dispensation approach

Selection of the appropriate pre-dose intoxication assessment and alcohol dispensation approach will depend on a range of factors, including:

- Client's medical circumstances and needs
- Client's stated goals and preferences (recorded at intake or follow-up meetings, when the client's response is not informed by current intoxication or withdrawal symptoms)
- MAP setting and location; potential for accessing outside alcohol if dose is denied
- MAP capacity for monitoring clients' wellness in between doses

For example, a binary intoxication assessment tool may be more appropriate in a clinical (e.g., hospital or long-term care) setting where patient's complex medical needs necessitate more regimented alcohol management. On the other hand, day programs or less intensive housing-based (e.g., shelters, supportive housing) environments may allow the provision of reduced doses to clients who

exhibit mild-to-moderate signs of intoxication; this may reduce the risk of outside drinking and enhance program retention by accommodating client preferences.

It is recommended that the intoxication assessment and dose dispensation approach be discussed with the client during managed alcohol planning; clients should be assured that withholding a scheduled dose is not intended as a punitive action and is intended purely to ensure client safety. The agreed-upon approach should be recorded in the client agreement so that it can be revisited in follow-up meetings.

Managed alcohol providers may consider offering a non-alcoholic alternative (e.g., "near beer," grape juice) to clients whose dose is withheld; this may help prevent the client from feeling excluded and enable them to participate in the social aspect of drinking as per their routine.

Assessment Tool 1 *(Binary assessment)*

(Adapted with gratitude from Alberta Health Services)

Assess and document prior to administration of prescribed alcohol.

Date (yyyy-mon-dd)						
Time (hh:mm)						
Speech **0:** Converses normally (Unaltered from baseline) **1:** Slurred and slowed speech, mumbling, disjointed, and/or unintelligible						
Coordination **0**: Unaltered walking and movements (from baseline) **1**: Staggering, unsteady, falling; difficulty coming to or maintaining a standing position						
Judgment and Mood **0**: Oriented and focused; appropriate behavior, judgment, and emotion **1**: Disoriented, confused, distractible; extremes of behavior (e.g., overly friendly, laughing intensely, short-tempered, aggressive)						
Level of Consciousness: **0**: Alert and attentive **1**: Nodding off, losing train of thought, difficult to rouse						
Total score						
Alcohol dose given						
Provider signature						

Instructions: If value equals 0, provide the dose.
If value is greater than 0, consider holding dose and reassess client in one hour.

Assessment Tool 2 *(graduated assessment allowing half doses)*

(Adapted with gratitude from the Sudbury MAP tool)

		COLUMN A and B Dose can be dispensed as scheduled		**COLUMN C** If client is presenting with any two of the following signs of intoxication, only half of a dose can be dispensed (if they are outside their normal behavioral patterns)	**COLUMN D** Dose should be withheld when the individual presents with any of the signs/symptoms listed in this column (if they are outside their normal behavioral patterns
		COLUMN A	*COLUMN B* *Consider increased monitoring for clients displaying any of the following*		
CRITERIA	**Speech**	Normal	*Slurred and/or slowed*	• Mumbling • Repetitive statements	• Disjointed • Incomprehensible • Loud, noisy speech • Crude/inappropriate comments or gestures
	Coordination	Regular walking and movements	• Tripping • Slow movements	• Unsteady • Staggering	• Difficulty sitting up straight • Falling off of chair • Difficulty coming to/or maintaining a standing position • Falling
	Mental Signs	Focused Expected behaviour, emotions, and judgments, based on knowledge of the client		Losing train of thought	• Confused • Agitated • Aggressive or argumentative • Disoriented • Drinking competitively • Overly friendly • Laughing intensely • Displaying mood swings • Lowered inhibitions
	Level Of Consciousness	Alert and attentive	Drowsy but easily roused	Nodding off	• Unable to follow/participate in conversation • Unable to perform any task

Appendix 8 Sample Clinical Assessment Form[t]

Client Information

Surname:	Given name(s):
Date of birth:	PHN:

Medical history (including mental health and substance use)

_____

_____

_____

Substance use

Type: **Amount:** **Frequency:**

_____

_____

_____

Note: Concurrent use of alcohol and other CNS depressants (e.g., benzodiazepines, opioids) is associated with a significantly increased risk of overdose. Where possible, clients should receive a comprehensive assessment of substance use. For individuals with co-occurring substance use or substance use disorders, clinical judgment should be used, with priority given to substances associated with risk of severe withdrawal, and clients educated on the risks of concurrent use.

Typical alcohol consumption

Number of drinking days in the past 7 days:

On a typical day:
What type of alcohol do you drink? (Circle all that apply)

Beer Wine Sherry Spirits Non-beverage

How much (of each type)? _____

_____

Total daily intake[u]:

t Adapted with gratitude from PHS Community Services Society

u Use standard drinks calculator: http://aodtool.cfar.uvic.ca/index-stddt.html

Alcohol-related harms

In the past 3 months, client has experienced:

- ☐ Alcohol withdrawal symptoms, including alcohol-related seizures
- ☐ Non-beverage alcohol use
- ☐ Alcohol-related falls or injuries
- ☐ Alcohol-related ER visits
- ☐ Passing out / losing consciousness from alcohol
- ☐ Survival drinking strategies (e.g., panhandling, recycling, sharing with friends)

Assessment for withdrawal risk, AUD, and AUD severity

PAWSS Score:

Optional:

AUD diagnosis and severity:

Number of DSM-5-TR symptoms:

Hazardous or harmful drinking (AUDIT score):

AUD severity (SADQ score):

Eligible for managed alcohol: Yes No

Client's baseline behavior (to be used to assess over-intoxication at time of provision):

Comments:

Completed by: _____ **Signature:** _____ **Date:**_____

Appendix 9 Alcohol Use Disorder Screening and Assessment Tools

The Alcohol Use Disorders Identification Test (AUDIT)[201]

Read questions as written. Record answers carefully. Begin the AUDIT by saying "Now I am going to ask you some questions about your use of alcoholic beverages during this past year." Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks". Place the corresponding answer number in the box at the right.

1. How often do you have a drink containing alcohol?

(0) Never [Skip to Qs 9-10]
(1) Monthly or less
(2) 2 to 4 times a month
(3) 2 to 3 times a week
(4) 4 or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

(0) 1 or 2
(1) 3 or 4
(2) 5 or 6
(3) 7, 8, or 9
(4) 10 or more

3. How often do you have six or more drinks on one occasion?

(0) Never
(1) Less than monthly
(2) Monthly
(3) Weekly
(4) Daily or almost daily

Skip to Questions 9 and 10 if total score for Questions 2 and 3 = 0

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

(0) Never
(1) Less than monthly
(2) Monthly
(3) Weekly
(4) Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?

(0) Never
(1) Less than monthly
(2) Monthly
(3) Weekly
(4) Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

(0) Never
(1) Less than monthly
(2) Monthly
(3) Weekly
(4) 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? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily	**9. Have you or someone else been injured as a result of your drinking?** (0) No (2) Yes, but not in the last year (4) Yes, during the last year
5. How often during the last year have you been unable to do what was normally expected from you because of drinking?* (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily	**10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?** (0) No (2) Yes, but not in the last year (4) Yes, during the last year
Interpretation: Scores of 8 or higher indicate hazardous or harmful use	**Total score:**

**Wording has been slightly modified from the original tool to avoid stigmatizing language.*

The AUDIT-Consumption (AUDIT-C) Tool[207]

1. How often do you have a drink containing alcohol? (0) Never (1) Monthly or less (2) 2 to 4 times a month (3) 2 to 3 times a week (4) 4 or more times a week	
2. How many units of alcohol do you drink on a typical day when you are drinking? (0) 1 or 2 (1) 3 or 4 (2) 5 or 6 (3) 7, 8, or 9 (4) 10 or more	
3. How often do you have six or more drinks on one occasion? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily	
Interpretation: In men, a score of 4 or more is considered positive for hazardous drinking. In women, a score of 3 or more is considered positive for hazardous drinking. If score is positive, proceed to diagnosis and assessment for AUD.	**Total score:**

Severity of Alcohol Dependence Questionnaire (SADQ)[208]

Please recall a typical period of heavy drinking in the last 6 months. When was this? _____

Please select a number (either 0, 1, 2, or 3) to show how often each of the following statements applied to you during this time.

Questions	Almost never	Sometimes	Often	Nearly always
I woke up feeling sweaty.	0	1	2	3
My hands shook first thing in the morning.	0	1	2	3
My whole body shook violently first thing in the morning.	0	1	2	3
I woke up absolutely drenched in sweat.	0	1	2	3
I dreaded waking up in the morning.	0	1	2	3
I was frightened of meeting people first thing in the morning.	0	1	2	3
I felt at the edge of despair when I awoke.	0	1	2	3
I felt very frightened when I awoke.	0	1	2	3
I liked to have a morning drink.	0	1	2	3
I always gulped my first few morning drinks down as quickly as possible.	0	1	2	3
I drank in the morning to get rid of the shakes.	0	1	2	3
I had a very strong craving for drink when I awoke.	0	1	2	3
I drank more than 1/4 bottle of spirits a day (or 4 pints of beer/1 bottles of wine).	0	1	2	3
I drank more than 1/2 bottle of spirits a day (or 8 pints of beer/2 bottles of wine).	0	1	2	3
I drank more than 1 bottle of spirits a day (or 15 pints of beer/3 bottles of wine).	0	1	2	3
I drank more than 2 bottles of spirits a day (or 30 pints of beer/4 bottles of wine).	0	1	2	3

Imagine the following situation: (a) You have been completely off drink for a few weeks. (b) You then drink very heavily for two days. How would you feel the morning after those two days of heavy drinking?

Symptom	No	Slight	Moderate	A lot
I would start to sweat.	0	1	2	3
My hands would shake.	0	1	2	3
My body would shake.	0	1	2	3
I would be craving for a drink.	0	1	2	3

TOTAL SADQ SCORE = _____

Interpretation:

Score	8-15	16-30	31-60
Indication	Mild dependence	Moderate dependence	Severe dependence

Prediction of Alcohol Withdrawal Severity Scale (PAWSS)[36]

PART A: THRESHOLD CRITERIA – Yes or No, no point	
	Have you consumed any amount of alcohol (i.e., been drinking) within the last 30 days? OR Did the patient have a positive (+) blood alcohol level (BAL) on admission?
	If the answer to either is *YES*, proceed to next questions.
PART B: BASED ON PATIENT INTERVIEW – 1 point each	
1.	**Have you been recently intoxicated/drunk, within the last 30 days?**
2.	**Have you ever undergone alcohol use disorder rehabilitation treatment or treatment for alcohol use disorder?* (i.e., in-patient or out-patient treatment programs or AA attendance)**
3.	**Have you ever experienced any previous episodes of alcohol withdrawal, regardless of severity?**
4.	**Have you ever experienced blackouts?**
5.	**Have you ever experienced alcohol withdrawal seizures?**
6.	**Have you ever experienced delirium tremens or DTs?**
7.	**Have you combined alcohol with other "downers" like benzodiazepines or barbiturates, during the last 90 days?**
8.	**Have you combined alcohol with any other substances, during the last 90 days?***
PART C: BASED ON CLINICAL EVIDENCE – 1 point each	
9.	Was the patient's blood alcohol level (BAL) greater than 200mg/dL? (SI units 43.5 mmol/L) OR **Have you consumed any alcohol in the past 24 hours?****
10.	Is there any evidence of increased autonomic activity? e.g., heart rate >120 bpm, tremor, agitation, sweating, nausea
Interpretation: Maximum score = 10. This instrument is intended as a SCREENING TOOL. The greater the number of positive findings, the higher the risk for the development of alcohol withdrawal syndrome (AWS). A score of ≥4 suggests *HIGH RISK* for moderate to severe (complicated) AWS; prophylaxis and/or inpatient treatment are indicated.	

**Slight language modifications have been made to avoid stigmatizing terminology*
*** The committee has added this modification due to the common absence of a BAL. Please see next page.*

An online version of the original (unmodified) PAWSS can be found at: https://www.mdcalc.com/prediction-alcohol-withdrawal-severity-scale.

Remarks and Cautions

The PAWSS has not been validated in outpatient care settings, or in youth or pregnant individuals. While this guidance document endorses the usefulness of the PAWSS for risk assessment in all settings and populations, it emphasizes that when making clinical decisions, **this tool should be used in conjunction with best clinical judgment based on a comprehensive assessment of a patient's medical history, current circumstances, needs, and preferences.**

Modifications

Question 9 – Blood Alcohol Level (BAL):

The vast majority of outpatient care settings will not be equipped to assess BAL at the point-of-care. As an alternative, the PAWSS administrator may ask patients:

- Have you consumed any alcohol in the past 24 hours?

Based on rates of alcohol metabolism and elimination in humans,[209] it is very unlikely that a patient who has not consumed alcohol in the past 24 hours would have a BAL greater than 200mg/dL. While any alcohol consumption in the past 24 hours is a conservative measure of BAL>200mg/dL (i.e., this low threshold may over-identify those at risk), it is the consensus of the committee that the benefits of identifying individuals at risk of severe complications outweigh the risk of false negatives for this questionnaire item.

Alternatively, if a portable breath alcohol concentration device (i.e., a "breathalyzer") is available, breath alcohol concentration can be used in place of BAL. Research indicates that breath alcohol concentration is strongly correlated with and an accurate proxy measure of BAL.[210,211]

Qualifiers

The following questionnaire items should be clearly understood by the PAWSS administrator and defined for the patient to maximize the accuracy of results.

Question 4 – Blackouts:

Blackouts are transient episodes of retrograde amnesia typically **without loss of consciousness that accompany various degrees of alcohol intoxication.**[36] Blackouts can be an indicator of severe intoxication or long-term alcohol use, as a considerable degree of alcohol tolerance is required to ingest the amount of alcohol that could trigger a subsequent episode of amnesia without loss of consciousness.[36] The PAWSS administrator should clearly distinguish between alcohol-related blackouts and loss of consciousness (i.e., "passing out") as they pose the question to the patient.

Question 5 – Withdrawal Seizures:

Withdrawal seizures are typically generalized and brief tonic-clonic seizures that occur 6-48 hours after reduction or discontinuation of alcohol use.[212] Patients may mistake other experiences, such as tremor, for a seizure, so it is important to define what is meant by a withdrawal seizure and differentiate from other withdrawal symptoms. Patients with AUD are at increased risk of idiopathic epilepsy or seizure for other reasons,[213,214] so the PAWSS administrator should clearly define as seizures that occur within 1-2 days of ceasing or greatly reducing alcohol use.

Question 6 – Delirium Tremens (DTs):

Delirium tremens is a severe consequence of alcohol withdrawal that requires immediate hospitalization and management; if left untreated, the risk of death is approximately 3-5%.[215] Symptoms include profound disorientation, confusion and agitation, accompanied by severe autonomic hyperactivity.[215] In colloquial language, delirium tremens or "DTs" has come to loosely represent general symptoms of alcohol withdrawal. The PAWSS administrator should clearly distinguish delirium tremens from other withdrawal symptoms to avoid false positive results.

The Clinical Institute Withdrawal Assessment of Alcohol Scale, revised (CIWA-Ar)[203]

Patient: _____ Date: _____ Time: _____

Pulse or heart rate, taken for one minute: _____ Blood pressure: _____

NAUSEA AND VOMITING— Ask "Do you feel sick to yourstomach? Have you vomited?" Observation.

0 no nausea and no vomiting
1
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves and vomiting

TACTILE DISTURBANCES— Ask "Have you any itching, pins andneedles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?" Observation.

0 none
1 very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning or numbness
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

TREMOR— Arms extended and fingers spread apart. Observation.

0 no tremor
1 not visible, but can be felt fingertip to fingertip
2
3
4 moderate, with patient's arms extended
5
6
7 severe, even with arms not extended

AUDITORY DISTURBANCES— Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things youknow are not there?" Observation.

0 not present
1 very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

PAROXYSMAL SWEATS— Observation.

0 no sweat visible
1 barely perceptible sweating, palms moist
2
3
4 beads of sweat obvious on forehead
5
6
7 drenching sweats

VISUAL DISTURBANCES— Ask "Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know arenot there?" Observation.

0 not present
1 very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

ANXIETY— Ask "Do you feel nervous?" Observation.

0 no anxiety, at ease
1 mild anxious
2
3
4 moderately anxious, or guarded, so anxiety is inferred
5
6
7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

HEADACHE, FULLNESS IN HEAD— Ask "Does your head feel different? Does it feel like there is a band around your head?" Do notrate for dizziness or light-headedness. Otherwise, rate severity

0 not present
1 very mild
2 mild
3 moderate
4 moderately severe
5 severe
6 very severe
7 extremely severe

AGITATION— Observation.

0 normal activity
1 somewhat more than normal activity
2
3
4 moderately fidgety and restless
5
6
7 paces back and forth during most of the interview, or constantly thrashes about

ORIENTATION AND CLOUDING OF SENSORIUM- Ask "What day is this? Where are you? Who am I?

0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place/or person

Total **CIWA-Ar** Score: _____

Maximum Possible Score: 67

Rater's Initials: _____

The **CIWA-Ar** is not copyrighted and may be reproduced freely. The assessment for monitoring withdrawal symptoms requires approximately 5 minutes to administer. The maximum score is 67 (see instrument). Patients scoring less than 10 do not usually need additional medication for withdrawal.

Sullivan JT, Sykora K, Schneiderman J, Naranjo CA & Sellers EM. Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol Scale CIWA-Ar. *Br J Addict*. 1989;84:1353-1357.

Interpretation:

Score	Severity
0-9	Very mild withdrawal
10-15	Mild withdrawal
16-20	Moderate withdrawal
>20	Severe withdrawal

Notes:

- Training is required to administer this tool accurately; a regular audit and feedback process is recommended to ensure intra- and inter-rater variability is within an acceptable range.[216,217]
- This tool should be used in conjunction with best clinical judgment when making decisions on appropriate medication protocols, schedules, and dosages.
- Due to the need for a clinical interview, the CIWA-Ar is not appropriate where there is a language barrier or if the patient is cognitively impaired, delirious, or displaying a decreased level of consciousness.[218]

Appendix 10 Sample Managed Alcohol Order

(Adapted from similar Vancouver Coastal Health and Northwest Territories forms)

MANAGED ALCOHOL

To schedule alcohol delivery for a client, call xxx-xxx-xxxx and fax this completed order to xxx-xxx-xxxx

Date:_____ Time:_____

MANAGED ALCOHOL DOSAGE:

Please select alcohol type(s) and complete dosing instructions (items with check boxes must be selected to be ordered):

Dosing Guide	
Type	**Dose**
Beer	341ml to 355ml = 1 can (1 dose)
Wine	142ml = 1 glass = (1 dose)
Do NOT exceed 18 total doses/24 hours	

Please specify total daily quantities for provision (staff will not divide daily doses):

☐ _____ x cans of beer (1 can = 341ml to 355mL = 1 dose)

☐ _____ x bottles of wine (1 750ml bottle = 5.3 doses)

PROVISION:

☐ Client to self-manage intake with once-daily provision

☐ Staff to provide _____ doses q _____h PRN to a max of _____ doses/24hrs

DURATION:

MONITORING INSTRUCTIONS:

COMMENTS:

Name_____ Signature _____ Contact number_____

Glossary

2S/LGBTQ: Two-Spirit, lesbian, gay, bisexual, trans, queer, and other gender and sexually diverse individuals (also see glossary entries for each respective term).

Acamprosate: A medication used for the treatment of AUD. Acamprosate reduces alcohol withdrawal symptoms and manages cravings by modifying responses to alcohol-related cognitive cues. It is believed to restore the imbalance between glutamate-mediated excitation and GABA-mediated inhibition of neural activity, and to reduce general neuronal hyperexcitability.

Alcohol use disorder: A chronic, relapsing/remitting medical condition characterized by recurrent use of alcohol and other drugs which cause significant clinical and functional impairment, exacerbated health conditions, decreased functioning and quality of life.

Benzodiazepine: A type of CNS depressant used to treat symptoms of alcohol withdrawal.

Bisexual: A person who has the capacity to form enduring physical, romantic, and/or emotional attractions to those of the same gender and those of another gender. People may experience this attraction in differing ways and degrees over their lifetime.

Carbamazepine: An anti-convulsant medication used to treat symptoms of alcohol withdrawal.

Clonidine: A centrally acting alpha-2 adrenergic agonist that can suppress persistent noradrenergic symptoms (e.g., hypertension, tachycardia) associated with alcohol withdrawal.

Continuum of AUD care: A comprehensive system of care for the management of AUD, designed to assess and meet the evolving needs of individuals with AUD at different stages from screening and diagnosis to treatment, harm reduction, and ongoing care.

Cultural humility: A process undertaken through self-reflection to understand personal and systemic biases, and to develop and maintain respectful processes and relationships based on mutual trust; it requires humbly acknowledging oneself as a learner when attempting to understand another person's experience.[v]

v Definitions borrowed and lightly adapted from the First Nation's Health Authority.

Cultural safety: An outcome in which people feel safe when receiving care in an environment free from racism and discrimination. It results from respectful engagement that seeks to address power imbalances that are inherent in the health care system.[a]

Damp services: Housing facilities or other services that admit intoxicated individuals to ensure they are not denied essential services due to intoxication, but do not allow alcohol on-site.

Delirium tremens: A serious, potentially life-threatening manifestation of alcohol withdrawal, characterized by the onset of severe confusion, disorientation, and/or hallucinations, accompanied by severe autonomic hyperactivity.

Determinants of health: The broad range of personal, social, economic, and environmental factors that impact the health of individuals and populations.

Financial management: A voluntary service offered in some managed alcohol programs intended to promote financial stability and independence among clients while ensuring the availability of funds for housing, nutrition, and other essential needs. In the context of MAPs, receiving financial management involves authorizing the service provider to receive the client's monthly income, deduct the agreed upon fees for MAP services, and dispense the remaining funds in agreed upon increments to support sustainable budgeting for the month's expenses.

Gabapentin: An anti-convulsant medication used to treat symptoms of alcohol withdrawal. It is also a second-line option for ongoing AUD care.

Gay: The adjective used to describe people whose enduring physical, romantic, and/or emotional attractions are to people of the same gender.

Harm reduction: Policies and programs that aim to minimize immediate health, social, and economic harms associated with the use of psychoactive substances, without necessarily requiring a decrease in substance use or a goal of abstinence.

Health care provider: May refer to doctors, nurse practitioners, registered nurses, registered psychiatric nurses, licensed practical nurses, and pharmacists.

High-risk drinking: Alcohol consumption that exceeds recommended daily or weekly limits (in Canada, defined as more than 3 standard drinks per day or 10 standard drinks per week for women, and more than 4 standard drinks per day or 12 standard drinks per week for men).

Housing First: A permanent housing model developed to accommodate individuals with co-occurring substance use disorders and mental health conditions who experience chronic homelessness. This low-barrier housing model does not impose restrictions on substance use or require participation in treatment as a prerequisite to obtaining housing, but does offer access to care, and psychosocial support services. Broadly, Housing First models can be categorized into two models: scattered-site housing and single-site housing (or congregate housing), which is also referred to as supportive housing (see also "Supportive Housing" and "Scattered-site Housing").

Housing-based programs/services: Community-based programs and services that are provided within, or coupled with, housing facilities or shelters.[w]

Illicit alcohol: See non-beverage alcohol.

Illicit drugs: Substances whose use is not legal or regulated.

Intergenerational trauma: The transmission of historical oppression and unresolved trauma from caregivers to children. May also be used to describe the emotional effects, adaptations, and coping patterns developed when living with a trauma survivor.

Lesbian: A woman whose enduring physical, romantic, and/or emotional attraction is to other women. Some individuals fitting this description may prefer to identify as gay (adj.) or as gay women.[x]

w Housing-based programs/services are referred to as "residential" programs/services in some texts; however, in light of the history of residential schools in Canada, which were used as a tool of forced assimilation and colonization against Indigenous Peoples, its use has been avoided in the present document.

x Definitions borrowed and lightly adapted from GLAAD Media Reference Guide

Managed alcohol program (MAP): A harm reduction strategy used to minimize the personal harm and adverse societal effects of severe AUD, particularly as experienced by individuals who may be homeless or unstably housed. Typically, a MAP will dispense small doses of alcohol to clients at regular intervals, as a means of both regulating alcohol intake and reducing unsafe consumption of non-beverage alcohol.

Medical management: Medical management is medically focused, unstructured, informal counselling provided by the treating clinician in conjunction with pharmacological treatment. Medical management includes but is not limited to, performing health and wellness checks, providing support and advice, assessing motivation and identifying barriers to change, creating a treatment plan, fostering medication adherence, optimizing dosing, supporting treatment adherence and relapse prevention, and providing referrals to appropriate health and social services.

Mutual-support/ peer-support programs: Support that is provided through a network of peers through meetings, open discussions of personal experiences and barriers to asking for help, sponsorship, peer-based 12-step programs, and other tools of recovery. Examples include Alcoholics Anonymous, Narcotics Anonymous, SMART Recovery, and LifeRing Secular Recovery.

Naltrexone: A long-acting opioid antagonist medication that prevents receptors from being activated by other opioids. Naltrexone is used to treat alcohol and opioid use disorders.

Non-beverage alcohol: Liquids with extremely high alcohol content that are not intended for human consumption, such as rubbing alcohol, mouthwash, cooking wine, and cologne (also referred to as illicit alcohol).

Ongoing AUD care: A stage within the continuum of care where patients who are engaged in AUD care (and their families, if involved in care) are offered a range of ongoing evidence-based pharmacotherapies, psychosocial treatment interventions, harm reduction services, and recovery support services, as needed over time, to continue working towards meeting their long-term goals.

Patient-centred care: Care that takes into account the unique needs, values, and preferences of each patient, and aims to engage and empower patients as experts in their own care, including acting as the primary agent for reducing harms related to substance use, setting individualized treatment goals that are realistic and meaningful, and collaboratively selecting treatment options or interventions that will best support achieving their individual goals.

Peer (as in peer navigator or peer support worker): A person who shares a common lived experience (e.g., of substance use) with the client.

People with lived and living experience: Individuals who have experienced substance use but are currently not using substances are referred to people with lived experience, while those who are currently using drugs are referred to as people with living experience. This terminology is intended highlight the status of these groups as first-hand knowledge holders and stakeholders who must be consulted for decisions related to substance use care.

Prediction of Alcohol Withdrawal Severity Scale (PAWSS): A score-based, clinician-administered predictive tool for assessing the risk of severe withdrawal complications.

Psychosocial supports: Non-therapeutic social support services that aim to improve overall individual and/or family stability and quality of life, which may include community services, social and family services, temporary and supported housing, income-assistance programs, vocational training, life skills education, and legal services.

Psychosocial treatment interventions: Structured and/or manualized treatments delivered by a trained care provider that incorporate principles of cognitive behavioural therapy, interpersonal therapy, motivational interviewing, dialectical behaviour therapy, contingency management, structured relapse prevention, biofeedback, family and/or group counselling. Psychosocial interventions may include culturally specific approaches such as traditional healers, Elder involvement, and Indigenous healing ceremonies.

Queer: An adjective used by some people whose sexuality is not heterosexual. Once considered a pejorative term, queer has been reclaimed by some 2S/LGBTQ+ people to describe themselves; however, it is not a universally accepted term even within the 2S/LGBTQ+ community.[3]

Recovery: A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.[y]

Relapse or return to use: May be defined differently by each person, however, a general definition would include a re-emergence of, or increase in severity of, alcohol disorder symptoms and/or harms related to alcohol use following a period of stability.

Scattered-site housing: A Housing First model whereby clients are offered individual housing units in a community and provided access to existing care and support services within that community so that they can engage with the society as community members.

Sobering centres: Temporary (<24 hours) accommodation facilities that provide clients experiencing acute intoxication with a safe environment and oversight by clinical staff while they recuperate from an episode of heavy drinking.

y Borrowed from the Substance Abuse and Mental Health Administration's "SAMHSA's Working Definition of Recovery: 10 Guiding Principles of Recovery"

Stabilization: Stabilization will be patient-specific, depending on each patient's circumstances and needs and how they change over time. Patients' DSM-5 diagnoses, physical and mental health comorbidities, and social determinants of health (e.g., poverty, homelessness) should be identified at baseline and tracked over time. Stabilization includes clinical stabilization (e.g., lack of cravings, improved sleep quality and duration, and overall wellbeing) as well as psychosocial stabilization (e.g., integrating new activities, re-connecting with family, and attaining safe housing).

Stigma: A set of negative attitudes and beliefs that motivate people to fear and discriminate against other people. Stigma, whether perceived or real, often fuels myths and misconceptions, and can influence choices. It can impact attitudes about seeking treatment, reactions from family and friends, behavioral health education and awareness, and the likelihood that someone will not seek or remain in treatment.

Supportive housing: A single-site Housing First model that typically offers clients accommodation in a standalone facility with on-site supportive services such as case management and primary medical care.

Survival drinking: A pattern of alcohol use where daily activities revolve around obtaining sufficient quantities of alcohol—sometimes by criminalized means—to avoid potentially fatal withdrawal symptoms.

Trans: Trans is an umbrella term that describes a wide range of people whose gender and/or gender expression differ from their assigned sex and/or the societal and cultural expectations of their assigned sex.[3]

Trauma-informed practice: Health care and other services grounded in an understanding of trauma that integrate the following principles: trauma awareness; safety and trustworthiness; choice, collaboration, and connection; strengths-based approaches; and skill-building. Trauma-informed services prioritize safety and empowerment and avoid approaches that are confrontational.

Trauma: Trauma can be understood as an experience that overwhelms an individual's capacity to cope. Trauma can result from a series of events or one significant event. Trauma may occur in early life (e.g., child abuse, disrupted attachment, witnessing others experience violence, or neglect) or later in life (e.g., accidents, war, unexpected loss, violence, or other life events out of one's control). Trauma can be devastating and can interfere with a person's sense of safety, sense of self, and sense of self-efficacy. Trauma can also impact a person's ability to regulate emotions and navigate relationships. People who have experienced trauma may use substances or other behaviours to cope with feelings of shame, terror, and powerlessness.

Two-Spirit: A term used by some Indigenous societies to describe people with diverse gender identities, gender expressions, gender roles, and sexual orientations. Dual-gendered, or 'two-spirited' people have been and are viewed differently in different Indigenous communities.[z]

Wet services: Housing facilities or other support services that allow alcohol use on site so that clients with AUD can access the service without risking alcohol withdrawal.

Withdrawal: Symptoms that can occur after long-term use of a substance is reduced or stopped; these symptoms occur if tolerance to a substance has occurred and vary according to substance. Withdrawal symptoms can include negative emotions such as stress, anxiety, or depression, as well as physical effects such as nausea, vomiting, muscle aches, and cramping, among others.

Withdrawal management/ detoxification: A set of pharmacological, psychosocial, and supportive care interventions that aim to manage withdrawal symptoms that occur when an individual with a substance use disorder stops or significantly reduces the use of that substance.

z Definition borrowed and lightly adapted from Qmunity's "Queer Terminology from A to Q"

References

1. Government of Canada. Canadian Alcohol and Drugs Survey (CADS): summary of results for 2019. Ottawa, 2021. Available at: https://www.canada.ca/en/health-canada/services/canadian-alcohol-drugs-survey/2019-summary.html#a2.

2. Paradis C, Butt P, Shield K, Poole N, Wells S, Naimi T, Sherk A, & the Low-Risk Alcohol Drinking Guidelines Scientific Expert Panels. Update of Canada's Low-Risk Alcohol Drinking Guidelines: Final Report for Public Consultation. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. 2022. Available at: https://ccsa.ca/sites/default/files/2022-08/CCSA-LRDG-Update-of-Canada%27s-LRDG-Final-report-for-public-consultation-en.pdf.

3. Statistics Canada. CANSIM — 82-624-X — Table 1 — Rates of selected mental or substance use disorders, lifetime and 12 month, Canada, household 15 and older, 2012. Published November 27, 2015. Available at: https://www150.statcan.gc.ca/n1/pub/82-624-x/2013001/article/tbl/tbl1-eng.htm.

4. Fairgrieve C, Fairbairn N, Samet JH, Nolan S. Nontraditional Alcohol and Opioid Agonist Treatment Interventions. *Medical Clinics of North America.* 2018;102(4):683-696.

5. Ivsins A, Pauly B, Brown M, et al. On the outside looking in: Finding a place for managed alcohol programs in the harm reduction movement. *International Journal of Drug Policy.* 2019;67:58-62.

6. Fazel S, Geddes JR, Kushel M. The health of homeless people in high-income countries: descriptive epidemiology, health consequences, and clinical and policy recommendations. *Lancet.* 2014;384(9953):1529-1540.

7. Torchalla I, Strehlau V, Li K, Krausz M. Substance use and predictors of substance dependence in homeless women. *Drug Alcohol Depend.* 2011;118(2-3):173-179.

8. Rehm J, Baliunas D, Brochu S, et al. The Costs of Substance Abuse in Canada 2002. Canadian Centre on Substance Abuse, Ottawa ON. Available at: http://www.ccsa.ca/Resource%20Library/ccsa-011332-2006.pdf. (Accessed Nov 13 2015). In:2006.

9. World Health Organization. *Global status report on alcohol and health - 2018 edition.* Geneva, Switzerland: WHO Press; September 21 2018.

10. Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, Patra J. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet.* 2009;373(9682):2223-2233.

11. Public Health Agency of Canada. The Chief Public Health Officer's Report on the State of Public Health in Canada 2015: Alcohol Consumption in Canada. Ottawa, ON: Public Health Agency of Canada. Published January 3, 2016. Available at: https://www.canada.ca/content/dam/canada/health-canada/migration/healthy-canadianspublications/department-ministere/state-public-health-alcohol-2015-etat-sante-publique-alcool/alt/state-phacalcohol-2015-etat-aspc-alcool-eng.pdf.

12. Shield KD, Kehoe T, Taylor B, Patra J, Rehm J. Alcohol-attributable burden of disease and injury in Canada, 2004. *Int J Public Health.* 2012;57(2):391-401.

13. Global Burden of Disease (GBD) Study 2016 Alcohol Collaborators. Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet.* 2018;392(10152):1015-1035.

14. Canadian Substance Use Costs and Harms Scientific Working Group. Canadian substance use costs and harms 2015–2017. (Prepared by the Canadian Institute for Substance Use Research and the Canadian Centre on Substance Use and Addiction.) Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. 2020. Available at: https://csuch.ca/.

15. Canadian Institute for Health Information. Health indicators interactive tool: Hospitalizations entirely caused by alcohol. https://yourhealthsystem.cihi.ca/hsp/inbrief?lang=en#!/indicators/061/hospitalizations-entirely-caused-byalcohol/;mapC1;mapLevel2;trend(C1);/. Published 2019. Accessed.

16. Canadian Institute for Health Information. *Alcohol Harm in Canada: Examining Hospitalizations Entirely Caused by Alcohol and Strategies to Reduce Alcohol Harm*. 2017. https://www.cihi.ca/sites/default/files/document/report-alcohol-hospitalizations-en-web.pdf. Accessed April 6, 2020.

17. Crane CA, Godleski SA, Przybyla SM, Schlauch RC, Testa M. The Proximal Effects of Acute Alcohol Consumption on Male-to-Female Aggression: A Meta-Analytic Review of the Experimental Literature. *Trauma Violence & Abuse.* 2016;17(5):520-531.

18. Foran HM, O'Leary KD. Alcohol and intimate partner violence: A meta-analytic review. *Clinical Psychology Review.* 2008;28(7):1222-1234.

19. Willey H, Eastwood B, Gee IL, Marsden J. Is treatment for alcohol use disorder associated with reductions in criminal offending? A national data linkage cohort study in England. *Drug Alcohol Depend.* 2016.

20. Canadian Substance Use Costs and Harms Scientific Working Group, Canadian Institute for Substance Use Research, Canadian Centre on Substance Use and Addiction. *Canadian substance use costs and harms (2007–2014).* Ottawa, Ontario2018.

21. Jonas DE, Garbutt JC, Amick HR, et al. Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force. *Annals of internal medicine.* 2012;157(9):645-654.

22. Moyer VA. Screening and behavioral counseling interventions in primary care to reduce alcohol misuse: U.S. preventive services task force recommendation statement. *Annals of internal medicine.* 2013;159(3):210-218.

23. Curry SJ, Krist AH, Owens DK, et al. Screening and Behavioral Counseling Interventions to Reduce Unhealthy Alcohol Use in Adolescents and Adults US Preventive Services Task Force Recommendation Statement. *Jama.* 2018;320(18):1899-1909.

24. O'Donnell A, Anderson P, Newbury-Birch D, et al. The impact of brief alcohol interventions in primary healthcare: a systematic review of reviews. *Alcohol Alcohol.* 2014;49(1):66-78.

25. Harris SK, Louis-Jacques J, Knight JR. Screening and brief intervention for alcohol and other abuse. *Adolesc Med State Art Rev.* 2014;25(1):126-156.

26. Bien TH, Miller WR, Tonigan JS. Brief interventions for alcohol problems: a review. *Addiction.* 1993;88(3):315-335.

27. Wilk AI, Jensen NM, Havighurst TC. Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. *J Gen Intern Med.* 1997;12(5):274-283.

28. M. K, L. W, L. B. Effectiveness of physician-based interventions with problem drinkers: a review. 1995;152(6):851-859.

29. Moyer A, Finney JW, Swearingen CE, Vergun P. Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations. *Addiction.* 2002;97(3):279-292.

30. Platt L, Melendez-Torres GJ, O'Donnell A, et al. How effective are brief interventions in reducing alcohol consumption: do the setting, practitioner group and content matter? Findings from a systematic review and metaregression analysis. *BMJ Open.* 2016;6(8):20.

31. Kaner EFS, Beyer FR, Muirhead C, et al. Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database Syst Rev.* 2018(2).

32. Frost H, Campbell P, Maxwell M, et al. Effectiveness of Motivational Interviewing on adult behaviour change in health and social care settings: A systematic review of reviews. *PLoS ONE [Electronic Resource].* 2018;13(10):e0204890.

33. Vipond J, Mennenga HA. Screening, Brief Intervention, and Referral to Treatment by Emergency Nurses: A Review of the Literature. *Journal of Emergency Nursing.* 2019;45(2):178-184.

34. Center for Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA). *Detoxification and Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 45. HHS Publication No. (SMA) 15-4131.* Rockville, MD2015.

35. Wood E, Albarqouni L, Tkachuk S, et al. Will this hospitalized patient develop severe alcohol withdrawal syndrome? The rational clinical examination systematic review. *JAMA.* 2018;320(8):825-833.

36. Maldonado JR, Sher Y, Ashouri JF, et al. The "Prediction of Alcohol Withdrawal Severity Scale" (PAWSS): systematic literature review and pilot study of a new scale for the prediction of complicated alcohol withdrawal syndrome. *Alcohol.* 2014;48(4):375-390.

37. Sullivan JT, Sykora K, Schneiderman J, Naranjo CA, Sellers EM. Assessment of alcohol withdrawal - the revised clinical institute withdrawal assessment for alcohol scale (CIWA-AR). *Brit J Addict.* 1989;84(11):1353-1357.

38. Jonas DE, Amick HR, Feltner C, et al. Pharmacotherapy for Adults With Alcohol Use Disorders in Outpatient Settings A Systematic Review and Meta-analysis. *Jama-Journal of the American Medical Association.* 2014;311(18):1889-1900.

39. Roesner S, Hackl-Herrwerth A, Leucht S, Lehert P, Vecchi S, Soyka M. Acamprosate for alcohol dependence. *Cochrane Database Syst Rev.* 2010(9).

40. Roesner S, Hackl-Herrwerth A, Leucht S, Vecchi S, Srisurapanont M, Soyka M. Opioid antagonists for alcohol dependence *Cochrane Database Syst Rev.* 2010(12).

41. Mann K, Lehert P, Morgan M. The efficacy of acamprosate in the maintenance of abstinence in alcohol-dependent individuals: results from a meta-analysis *Alcohol Clin Exp Res.* 2004;28(1):51-63.

42. Blodgett JC, Del Re AC, Maisel NC, Finney JW. A meta-analysis of topiramate's effects for individuals with alcohol use disorders. *Alcohol Clin Exp Res.* 2014;38(6):1481-1488.

43. Furieri FA, Nakamura-Palacios EM. Gabapentin reduces alcohol consumption and craving: a randomized, double-blind, placebo-controlled trial. *J Clin Psychiatry.* 2007;68(11):1691-1700.

44. Mason BJ, Light JM, Williams LD, Drobes DJ. Proof-of-concept human laboratory study for protracted abstinence in alcohol dependence: effects of gabapentin. *Addict Biol.* 2009;14(1):73-83.

45. Mason BJ, Quello S, Goodell V, Shadan F, Kyle M, Begovic A. Gabapentin Treatment for Alcohol Dependence A Randomized Clinical Trial. *Jama Internal Medicine.* 2014;174(1):70-77.

46. Smedslund G, Berg RC, Hammerstrom KT, et al. Motivational interviewing for substance abuse. *Cochrane Database of Systematic Reviews.* 2011(5).

47. Rollnick S, Miller W. What is motivational interviewing? *Behav Cogn Psychother.* 1995;23(04):325-334.

48. Pauly B., Stockwell T., Chow C., Gray E., Krysowaty B., Vallance, K. Zhao, J. & Perkin K.Towards alcohol harm reduction: Preliminary results from an evaluation of a Canadian managed alcohol program. Victoria, BC: Centre for Addictions Research of British Columbia. 2013. Available at: https://www.homelesshub.ca/sites/default/files/attachments/Towards%20Alcohol%20Harm%20Reduction.pdf.

49. Marshall B, McGlynn E, King A. Sobering centers, emergency medical services, and emergency departments: A review of the literature. *Am J Emerg Med.* 2021;40:37-40.

50. Smith-Bernardin S. Changing the Care Environment for Acute Intoxication: Providing Intoxicated Adults With an Alternative to the Emergency Department and Jail. *J Stud Alcohol Drugs.* 2021;82(5):678-684.

51. Nielson E, Novotna G Berenyl R, Olson N. Harm Reduction Interventions for Chronic and Severe Alcohol Use Among Populations Experiencing Homelessness: A Literature Review. University of Regina. 2018. Available at: https://www.uregina.ca/arts/community-research/Research/FINAL%20Managed%20Alcohol%20Programs_Report%20September%202018_.pdf.

52. Watson DP, Shuman V, Kowalsky J, Golembiewski E, Brown M. Housing First and harm reduction: a rapid review and document analysis of the US and Canadian open-access literature. *Harm Reduct J.* 2017;14(1):30.

53. Brown L, Skulsh J, Morgan R, Kuehlke R, Graham B. Research into action? The Eastside Illicit Drinkers Group for Education's (EIDGE) experiences as a community-based group in Vancouver, Canada. *Drug & Alcohol Review.* 2018;37 Suppl 1:S156-S158.

54. Ungaro K. Non-beverage Alcohol Consumption & Harm Reduction TrendsA Report for the Thunder Bay Drug Strategy.Thunder Bay Drug Strategy. 2017. Available at: https://www.thunderbay.ca/en/city-hall/resources/Documents/ThunderBayDrugStrategy/Non-Beverage-Alcohol-and-Harm-Reduction.pdf.

55. Grazioli VS, Hicks J, Kaese G, Lenert J, Collins SE. Safer-drinking strategies used by chronically homeless individuals with alcohol dependence. *Journal of Substance Abuse Treatment.* 2015;54:63-68.

56. Ezard, N., Dolan, K., Baldry, E., Burns, L., Day, C., Hodge, S., Cubitt, T., Loesch, B., & Mackay, T. Feasibility of a Managed Alcohol Program (MAP) for Sydney's homeless. Canberra: Foundation for Alcohol Research and Education. 2015. Available at: https://fare.org.au/wp-content/uploads/Feasibility-of-a-Managed-Alcohol-Program-for-Sydneys-homeless.pdf.

57. Podymow T, Turnbull J, Coyle D, Yetisir E, Wells G. Shelter-based managed alcohol administration to chronically homeless people addicted to alcohol. *CMAJ Canadian Medical Association Journal.* 2006;174(1):45-49.

58. Moos RH, Moos BS. Rates and predictors of relapse after natural and treated remission from alcohol use disorders. *Addiction.* 2006;101(2):212-222.

59. Alcohol Concern, Alcohol Research UK. *The hardest hit: Addressing the crisis in alcohol treatment services.* May 2018.

60. Grant BF, Goldstein RB, Saha TD, et al. Epidemiology of DSM-5 Alcohol Use Disorder Results From the National Epidemiologic Survey on Alcohol and Related Conditions III. *Jama Psychiatry.* 2015;72(8):757-766.

61. Kouimtsidis C, Pauly B, Parkes T, Stockwell T, Baldacchino AM. COVID-19 Social Restrictions: An Opportunity to Re-visit the Concept of Harm Reduction in the Treatment of Alcohol Dependence. A Position Paper. *Front Psychiatry.* 2021;12:623649.

62. McVicar D, Moschion J, van Ours JC. From substance use to homelessness or vice versa? *Soc Sci Med.* 2015;136-137:89-98.

63. Pauly B, Brown M, Evans J, et al. "There is a Place": impacts of managed alcohol programs for people experiencing severe alcohol dependence and homelessness. *Harm Reduction Journal.* 2019;16(1):70.

64. Pauly BB, Vallance K, Wettlaufer A, et al. Community managed alcohol programs in Canada: Overview of key dimensions and implementation. *Drug & Alcohol Review.* 2018;37 Suppl 1:S132-S139.

65. McCormack RP, Hoffman LF, Norman M, Goldfrank LR, Norman EM. Voices of homeless alcoholics who frequent Bellevue Hospital: a qualitative study. *Annals of Emergency Medicine.* 2015;65(2):178-186.e176.

66. Erickson RA, Stockwell T, Pauly BB, et al. How do people with homelessness and alcohol dependence cope when alcohol is unaffordable? A comparison of residents of Canadian managed alcohol programs and locally recruited controls. *Drug & Alcohol Review.* 2018;37 Suppl 1:S174-S183.

67. Pauly B, King V, Smith A, et al. Breaking the cycle of survival drinking: insights from a non-residential, peer-initiated and peer-run managed alcohol program. *Drugs: Education, Prevention and Policy.* 2021;28(2):172-180.

68. Wettlaufer, A., Pauly, B., Brown, M., Chow, C., Vallance, K., Kauppi, C., Larocque, C., Stockwell, T.,& Zhao, J. Towards alcohol harm reduction: Results from an evaluation of a CanadianManage Alcohol Program. Victoria, BC: Canadian Institute for Substance Use Research. 2014. Available ar: https://www.uvic.ca/research/centres/cisur/assets/docs/map-sudbury-report-exec-summary.pdf.

69. Pauly BB, Gray E, Perkin K, et al. Finding safety: a pilot study of managed alcohol program participants' perceptions of housing and quality of life. *Harm Reduction Journal.* 2016;13(1):15.

70. Collins SE, Jones CB, Hoffmann G, et al. In their own words: Content analysis of pathways to recovery among individuals with the lived experience of homelessness and alcohol use disorders. *Int J Drug Policy.* 2016;27:89-96.

71. Collins SE, Grazioli VS, Torres NI, et al. Qualitatively and quantitatively evaluating harm-reduction goal setting among chronically homeless individuals with alcohol dependence. *Addictive Behaviors.* 2015;45:184-190.

72. Clifasefi SL, Collins SE, Torres NI, Grazioli VS, Mackelprang JL. Housing First, but What Comes Second? A Qualitative Study of Resident, Staff and Management Perspectives on Single-Site Housing First Program Enhancement. *J Community Psychol.* 2016;44(7):845-855.

73. Collins SE, Malone DK, Clifasefi SL. Housing retention in single-site housing first for chronically homeless individuals with severe alcohol problems. *Am J Public Health.* 2013;103 Suppl 2(Suppl 2):S269-274.

74. Clifasefi SL, Malone DK, Collins SE. Exposure to project-based Housing First is associated with reduced jail time and bookings. *Int J Drug Policy.* 2013;24(4):291-296.

75. Gaetz S, Scott F, Gulliver T (Eds.). Housing First in Canada: Supporting Communities to End Homelessness. Toronto: Canadian Homelessness Research Network Press. 2013. Available at: https://yorkspace.library.yorku.ca/xmlui/handle/10315/29317.

76. Gaetz S. Commentary: Harm reduction, managed alcohol programs and doing the right thing. *Drug & Alcohol Review.* 2018;37 Suppl 1:S195-S196.

77. Pauly B, Wallace B, Barber K. Turning a blind eye: implementation of harm reduction in a transitional programme setting. *Drugs: Education, Prevention & Policy.* 2018;25(1):21-30.

78. Pauly B. Harm reduction through a social justice lens. *Int J Drug Policy.* 2008;19(1):4-10.

79. Ongaro K. Non-beverage Alcohol Consumption and Harm Reduction Trends. Thunder Bay Drug Strategy. June 15, 2017. Available at: https://www.thunderbay.ca/en/city-hall/resources/Documents/ThunderBayDrugStrategy/Non-Beverage-Alcohol-and-Harm-Reduction.pdf.

80. Rehm J, Kanteres F, Lachenmeier DW. Unrecorded consumption, quality of alcohol and health consequences. *Drug Alcohol Rev.* 2010;29(4):426-436.

81. McKee M, Suzcs S, Sárváry A, et al. The composition of surrogate alcohols consumed in Russia. *Alcohol Clin Exp Res.* 2005;29(10):1884-1888.

82. Lachenmeier DW, Monakhova YB, Markova M, Kuballa T, Rehm J. What happens if people start drinking mouthwash as surrogate alcohol? A quantitative risk assessment. *Food Chem Toxicol.* 2013;51:173-178.

83. Fairgrieve C, Fairbairn N, Samet JH, Nolan S. Nontraditional Alcohol and Opioid Agonist Treatment Interventions. *The Medical clinics of North America.* 2018;102(4):683-696.

84. Pauly BB, Vallance K, Wettlaufer A, et al. Community managed alcohol programs in Canada: Overview of key dimensions and implementation. *Drug and alcohol review.* 2018;37 Suppl 1:S132-s139.

85. Smith-Bernardin SM, Suen LW, Barr-Walker J, Cuervo IA, Handley MA. Scoping review of managed alcohol programs. *Harm Reduction Journal.* 2022;19(1):82.

86. Stockwell, T., Pauly, B., Chow, C., Vallance, K., Perkin, K. Evaluation of a managed alcohol program in Vancouver, BC: Early findings and reflections on alcohol harm reduction. CARBC Bulletin #9, Victoria, British Columbia: University of Victoria. 2013. Available at: https://www.homelesshub.ca/sites/default/files/attachments/bulletin9-evaluation-managed-alcohol-program.pdf.

87. Brooks HL, Kassam S, Salvalaggio G, Hyshka E. Implementing managed alcohol programs in hospital settings: A review of academic and grey literature. *Drug and alcohol review.* 2018;37(S1):S145-S155.

88. Pauly B, Stockwell T, Chow C, et al. *Towards alcohol harm reduction: preliminary results from an evaluation of a Canadian managed alcohol program.* Victoria, BC: Centre for Additions Research of British Columbia;2013.

89. Stockwell T, Pauly BB, Chow C, et al. Does managing the consumption of people with severe alcohol dependence reduce harm? A comparison of participants in six Canadian managed alcohol programs with locally recruited controls. *Drug & Alcohol Review.* 2018;37 Suppl 1:S159-S166.

90. Muckle W, Muckle J, Welch V, Tugwell P. Managed alcohol as a harm reduction intervention for alcohol addiction in populations at high risk for substance abuse. *Cochrane Database of Systematic Reviews.* 2012;12:CD006747.

91. Institut universitaire sur les dépendances. Plan d'implantation de services de consommation d'alcool supervisée à Montréal. 2020. Available at: https://ciusss-centresudmtl.gouv.qc.ca/sites/ciussscsmtl/files/media/document/Plan%20d%27implantation%20final%2031%20mars%20%281%29.pdf.

92. Stockwell T, Gruenewald PJ, Toumbourou JW, Loxley W. Recommendations for New Directions in the Prevention of Risky Substance Use and Related Harms. In: Stockwell T, Gruenewald PJ, Toumbourou JW, Loxley W, eds. *Preventing harmful substance use: The evidence base for policy and practice.* New York, NY: John Wiley & Sons Ltd; 2005:443-464.

93. Podymow T, Turnbull J, Coyle D, Yetisir E, Wells G. Shelter-based managed alcohol administration to chronically homeless people addicted to alcohol. *Canadian Medical Association Journal.* 2006;174(1):45–49.

94. Vallance K, Stockwell T, Pauly B, et al. Do managed alcohol programs change patterns of alcohol consumption and reduce related harm? A pilot study. *Harm Reduction Journal.* 2016;13(1):13.

95. Stockwell T, Pauly BB, Chow C, et al. Does managing the consumption of people with severe alcohol dependence reduce harm? A comparison of participants in six Canadian managed alcohol programs with locally recruited controls. *Drug and alcohol review.* 2018;37 Suppl 1:S159-s166.

96. Stockwell T, Zhao J, Pauly B, et al. Trajectories of Alcohol Use and Related Harms for Managed Alcohol Program Participants over 12 Months Compared with Local Controls: A Quasi-Experimental Study. *Alcohol & Alcoholism.* 2021;09:09.

97. Zhao J, Stickwell T, Pauly B, Wettlaufer A, Chow C. Participation in Canadian Managed Alcohol Programs and associated probabilities of emergency room presentation, hospitalization and death: A retrospective cohort study. Alcohol and Alcoholism. 2021.

98. Evans J, Semogas D, Smalley JG, Lohfeld L. "This place has given me a reason to care": Understanding 'managed alcohol programs' as enabling places in Canada. *Health & Place.* 2015;33:118-124.

99. Hammond K, Gagne L, Pauly B, Stockwell T. A Cost-benefit Analysis of a Canadian Managed Alcohol Program: A report prepared by the Centre for Addictions Research of British Columbia for the Kwae Kii Win Centre Managed Alcohol Program. February 2, 2016. Available at: https://www.uvic.ca/research/centres/cisur/assets/docs/report-a-cost-benefit-analysis-of-a-canadian-map.pdf

100. Brooks HL, Kassam S, Salvalaggio G, Hyshka E. Implementing managed alcohol programs in hospital settings: A review of academic and grey literature. *Drug and alcohol review.* 2018;37(S1):S145-S155.

101. Pauly B, Brown M, Chow C, et al. "If I knew I could get that every hour instead of alcohol, I would take the cannabis": need and feasibility of cannabis substitution implementation in Canadian managed alcohol programs. *Harm Reduction Journal.* 2021;18(1):65.

102. Lucas P, Walsh Z, Crosby K, et al. Substituting cannabis for prescription drugs, alcohol and other substances among medical cannabis patients: The impact of contextual factors. *Drug & Alcohol Review.* 2016;35(3):326-333.

103. Lucas P, Boyd S, Milloy MJ, Walsh Z. Reductions in alcohol use following medical cannabis initiation: results from a large cross-sectional survey of medical cannabis patients in Canada. *International Journal of Drug Policy.* 2020;86:102963.

104. Lucas P, Baron EP, Jikomes N. Medical cannabis patterns of use and substitution for opioids & other pharmaceutical drugs, alcohol, tobacco, and illicit substances; results from a cross-sectional survey of authorized patients. *Harm Reduction Journal.* 2019;16(1):9.

105. Lucas P, Walsh Z. Medical cannabis access, use, and substitution for prescription opioids and other substances: A survey of authorized medical cannabis patients. *Int J Drug Policy.* 2017;42:30-35.

106. Subbaraman MS, Metrik J, Patterson D, Swift R. Cannabis use during treatment for alcohol use disorders predicts alcohol treatment outcomes. *Addiction.* 2017;112(4):685-694.

107. Canadian Institute for Substance Use Research, BC Centre on Substance Use. Operational Guidance for Implementation of Managed Alcohol for Vulnerable Populations. 2020. Available at: www.bccsu.ca/alcohol-use-disorder.

108. Canadian Institute for Substance Use Research. Overview of Managed Alcohol Program (MAP) Sites in Canada. University of Victoria. Updated March 2020. Available at: https://www.uvic.ca/research/centres/cisur/assets/docs/resource-overview-of-MAP-sites-in-Canada.pdf.

109. Giesbrecht N, Österberg E. Alcohol retailing in Canadian and Nordic contexts: Challenges and opportunities in balancing trade and prevention agendas. *Contemporary Drug Problems: An Interdisciplinary Quarterly.* 2012;39(1):107-145.

110. McMaster Health Forum. Rapid Synthesis: Determining the Features of Managed Alcohol Programs. McMaster University. February 11, 2019. https://www.mcmasterforum.org/docs/default-source/product-documents/rapid-responses/determining-the-features-of-managed-alcohol-programs.pdf?sfvrsn=2.

111. The Lighthouse Supported Living. Implement community alcohol reduction programs. Saskatoon https://www.lighthousesaskatoon.org/services/housingplus/supportedliving/.

112. George Spady Society. Place of Dignity. Edmonton. http://www.gspady.org/place-of-dignity-pod/.

113. Drug Users Resource Centre. Who we are. Vancouver: Drug Users Resource Centre. http://www.durc.rocks/whatwedo.

114. Station Street. Community managed alcohol program. Vancouver: PHS Community Services Society. https://www.phs.ca/project/community-managed-alcohol-program/.

115. CentralEasthealthline.ca. Annex Harm Reduction Program. Toronto. https://www.centraleasthealthline.ca/displayservice.aspx?id=133555.

116. Haight K. Environmental Scan:Subpopulation Housing Needs in Lethbridge. December 12, 2016. Available at: https://homelesshub.ca/sites/default/files/attachments/FINAL%2520-%2520Enviro%2520Scan%2520for%2520City%2520of%2520Lethbridge.pdf.

117. Excell Sosiety. Designated Assisted Living. https://excelsociety.org/designated-assisted-living/.

118. Trinity Place Foundation of Alberta. Peter Coyle Place. Calgary: Trinity Place Foundation of Alberta. http://tpfa.ca/peter-coyle-place-2/.

119. NiGiNan Housing Ventures. Welcome to Ambrose Place. Edmonton: NiGiNan Housing Ventures. https://niginan.squarespace.com/welcome-to-ambrose-place/.

120. Wesley. Special Care Unit. Hamilton. https://wesley.ca/services/housinghomelessness/harold-e-ballard-special-care-unit/.

121. A Place for Mom. Urban Manor Housing Society. Edmonton: A Place for mom. https://www.assistedliving.com/alberta/edmonton/urban-manor-housing-society/.

122. Shelter House. Kwae Kii Win Managed Alcohol Centre. Thunder Bay: Shelter House. https://www.shelterhouse.on.ca/services/kwae-kii-win/.

123. Pauly B, Graham B, Vallance K, Brown M, Stockwell T. Scale Up of Managed Alcohol Programs. Cicur Bulletin #20. Victoria BC: University of Victoria. 2020. Available at: https://www.uvic.ca/research/centres/cisur/assets/docs/bulletin-20-scale-up-of-maps.pdf.

124. Vera S, McMaster M. ALCOHOL - RELATED EMERGENCY DEPARTMENT ATTENDANCE: PALMERSTON NORTH STUDY. *Emergency Nurse New Zealand.* 2013:17-17.

125. Chow C, Wettlaufer A, Zhao J, Stockwell T, Pauly BB, Vallance K. Counting the cold ones: A comparison of methods measuring total alcohol consumption of managed alcohol program participants. *Drug & Alcohol Review.* 2018;37 Suppl 1:S167-S173.

126. NorthWesthealthline.ca. Lake of The Woods District Hospital - Morningstar Centre - Managed Alcohol Program. https://www.northwesthealthline.ca/displayservice.aspx?id=173381 (

127. Ezard N, Cecilio M, Clifford B, et al. A managed alcohol program in Sydney, Australia: Acceptability, cost-savings and non-beverage alcohol use. . *Drug and Alcohol Review.* 2018;37:S184-S194.

128. Carver H, Parkes T, Browne T, Matheson C, Pauly B. Investigating the need for alcohol harm reduction and managed alcohol programs for people experiencing homelessness and alcohol use disorders in Scotland. *Drug & Alcohol Review.* 2021;40(2):220-230.

129. Substance Abuse and Mental Health Services Administration (SAMHSA). Alcohol Management as Harm Reduction. 2016. Available at: https://www.samhsa.gov/homelessness-programs-resources/hpr-resources/alcohol-management-harm-reduction.

130. Center for Health Care Strategies (California). Alcohol Management Program Pilots: Homelessness and COVID-19: Innovation Snapshot. 2020. Available at: https://www.chcf.org/wp-content/uploads/2020/07/HomelessnessCOVID19AlcoholManagementProgramPilots.pdf.

131. Depaul Ireland. Depaul Ireland Sundial House review: 18 month review. 2010. Available at: https://www.drugsandalcohol.ie/18223/.

132. Raphael D. Chapter 1: Social Determinants of Health: Key Issues and Themes. In: Raphael D, ed. *Social Determinants of Health: Canadian Perspectives.* 3rd ed. Toronto, Ontario: Canadian Scholars' Press Inc.; 2016:3-31.

133. World Health Organization, Commission on Social Determinants of Health. *Closing the gap in a generation: Health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health.* Geneva, Switzerland2008.

134. Mikkonen J, Raphael D. *Social Determinants of Health: The Canadian Facts.* Toronto, Ontario2010.

135. Hankivsky O, Christoffersen A. Intersectionality and the determinants of health: a Canadian perspective. *Critical Public Health.* 2008;18(3):271-283.

136. Jones L, Bates G, McCoy E, Bellis MA. Relationship between alcohol-attributable disease and socioeconomic status, and the role of alcohol consumption in this relationship: a systematic review and meta-analysis. *BMC Public Health.* 2015;15.

137. Gilbert PA, Zemore SE. Discrimination and drinking: A systematic review of the evidence. *Soc Sci Med.* 2016;161:178-194.

138. Barrio P, Gual A. Patient-centered care interventions for the management of alcohol use disorders: a systematic review of randomized controlled trials. *Patient Preference and Adherence.* 2016;10:1823-1845.

139. Institute of Medicine, Committee on Crossing the Quality Chasm. *Adaptation to Mental Health and Addictive Disorders. Improving the Quality of Health Care for Mental and Substance-Use Conditions.* Washington, DC2006.

140. Barry MJ, Edgman-Levitan S. Shared decision making--pinnacle of patient-centered care. *N Engl J Med.* 2012;366(9):780-781.

141. Friedrichs A, Spies M, Härter M, Buchholz A. Patient Preferences and Shared Decision Making in the Treatment of Substance Use Disorders: A Systematic Review of the Literature. *PloS one.* 2016;11(1):e0145817-e0145817.

142. Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. *Soc Sci Med.* 2000;51(7):1087-1110.

143. Swift JK, Callahan JL. The impact of client treatment preferences on outcome: a meta-analysis. *J Clin Psychol.* 2009;65(4):368-381.

144. Graff FS, Morgan TJ, Epstein EE, et al. Engagement and retention in outpatient alcoholism treatment for women. *The American journal on addictions.* 2009;18(4):277-288.

145. Hamann J, Langer B, Winkler V, et al. Shared decision making for in-patients with schizophrenia. *Acta Psychiatr Scand.* 2006;114(4):265-273.

146. Robinson SM. "Alcoholic" or "Person with alcohol use disorder"? Applying person-first diagnostic terminology in the clinical domain. *Substance Abuse.* 2017;38(1):9-14.

147. Cunningham JA, Sobell LC, Chow VMC. WHATS IN A LABEL - THE EFFECTS OF SUBSTANCE TYPES AND LABELS ON TREATMENT CONSIDERATIONS AND STIGMA. *Journal of Studies on Alcohol.* 1993;54(6):693-699.

148. Kelly JF, Westerhoff CM. Does it matter how we refer to individuals with substance-related conditions? A randomized study of two commonly used terms. *International Journal of Drug Policy.* 2010;21(3):202-207.

149. Luoma JB, Twohig MP, Waltz T, et al. An investigation of stigma in individuals receiving treatment for substance abuse. *Addictive Behaviors.* 2007;32(7):1331-1346.

150. Schomerus G, Corrigan PW, Klauer T, Kuwert P, Freyberger HJ, Lucht M. Self-stigma in alcohol dependence: Consequences for drinking-refusal self-efficacy. *Drug and Alcohol Dependence.* 2011;114(1):12-17.

151. Glass JE, Mowbray OP, Link BG, Kristjansson SD, Bucholz KK. Alcohol stigma and persistence of alcohol and other psychiatric disorders: A modified labeling theory approach. *Drug and Alcohol Dependence.* 2013;133(2):685-692.

152. Public Health Agency of Canada. Communicating about Substance Use in Compassionate, Safe and Non-Stigmatizing Ways. January 2020. Available at: https://www.canada.ca/en/public-health/services/publications/healthy-living/communicating-about-substance-use-compassionate-safe-non-stigmatizing-ways-2019.html.

153. Substance Abuse and Mental Health Services Administration (SAMHSA). *Working Definition of Recovery.* Rockville, MD2012.

154. Mental Health Commission of Canada. *Guidelines for Recovery-Oriented Practice.* 2015.

155. BC Harm Reduction Strategies and Services. Respectful Language and Stigma: Regarding People Who Use Substances. In: Toward the Heart; 2017.

156. Grant BF, Saha TD, Ruan WJ, et al. Epidemiology of DSM-5 Drug Use Disorder: Results From the National Epidemiologic Survey on Alcohol and Related Conditions-III. *JAMA Psychiatry.* 2016;73(1):39-47.

157. Kingston REF, Marel C, Mills KL. A systematic review of the prevalence of comorbid mental health disorders in people presenting for substance use treatment in Australia. *Drug and alcohol review.* 2017;36(4):527-539.

158. Roberts NP, Roberts PA, Jones N, Bisson JI. Psychological therapies for post-traumatic stress disorder and comorbid substance use disorder. *Cochrane Database Syst Rev.* 2016;4:Cd010204.

159. BC Centre of Excellence in Women's Health. *Trauma-Informed Practice Guide.* May 2013.

160. Marsh TN, Coholic D, Cote-Meek S, Najavits LM. Blending Aboriginal and Western healing methods to treat intergenerational trauma with substance use disorder in Aboriginal peoples who live in northeastern Ontario, Canada. *Harm Reduct J.* 2015;12:14.

161. Schmidt R, Poole N, Greaves L, Hemsing N, Centre of Excellence in Women's Health. *New Terrain: Tools to Integrate Trauma and Gender Informed Responses into Substance Use Practice and Policy.* Vancouver, BC2018.

162. Crabtree A, Latham N, Morgan R, Pauly B, Bungay V, Buxton JA. Perceived harms and harm reduction strategies among people who drink non-beverage alcohol: Community-based qualitative research in Vancouver, Canada. *International Journal of Drug Policy.* 2018;59:85-93.

163. Public Health Agency of Canada. *Trauma and violence-informed approaches to policy and practice.* February 2 2018.

164. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment. *Trauma-Informed Care in Behavioral Health Services. Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801.* Rockville, MD2014.

165. EQUIP Health Care, Research to Equip Health Care for Equity. *Trauma- and Violence-Informed Care (TVIC). A Tool for Health & Social Service Organizations and Providers.* March 14 2018.

166. Gilbert PA, Pass LE, Keuroghlian AS, Greenfield TK, Reisner SL. Alcohol research with transgender populations: A systematic review and recommendations to strengthen future studies. *Drug Alcohol Depend.* 2018;186:138-146.

167. Talley AE, Gilbert PA, Mitchell J, Goldbach J, Marshall BDL, Kaysen D. Addressing gaps on risk and resilience factors for alcohol use outcomes in sexual and gender minority populations. *Drug and alcohol review.* 2016;35(4):484-493.

168. Nathoo T, Poole N, Wolfson L, Schmidt R, Hemsing N, Gelb K. *Doorways to Conversation: Brief Intervention on Substance Use with Girls and Women*. Vancouver, BC June 2018.

169. Stone R. Pregnant women and substance use: fear, stigma, and barriers to care. *Health Justice.* 2015;3:2.

170. Flentje A, Heck NC, Sorensen JL. Characteristics of transgender individuals entering substance abuse treatment. *Addict Behav.* 2014;39(5):969-975.

171. Flentje A, Livingston NA, Roley J, Sorensen JL. Mental and Physical Health Needs of Lesbian, Gay, and Bisexual Clients in Substance Abuse Treatment. *J Subst Abuse Treat.* 2015;58:78-83.

172. Hughto JMW, Quinn EK, Dunbar MS, Rose AJ, Shireman TI, Jasuja GK. Prevalence and Co-occurrence of Alcohol, Nicotine, and Other Substance Use Disorder Diagnoses Among US Transgender and Cisgender Adults. *JAMA Network Open.* 2021;4(2):e2036512-e2036512.

173. White Hughto JM, Pachankis JE, Willie TC, Reisner SL. Victimization and depressive symptomology in transgender adults: The mediating role of avoidant coping. *J Couns Psychol.* 2017;64(1):41-51.

174. Reisner SL, Pardo ST, Gamarel KE, White Hughto JM, Pardee DJ, Keo-Meier CL. Substance Use to Cope with Stigma in Healthcare Among U.S. Female-to-Male Trans Masculine Adults. *LGBT Health.* 2015;2(4):324-332.

175. Substance Abuse and Mental Health Services Administration (SAMHSA). A Provider's Introduction to Substance Abuse Treatment for Lesbian, Gay, Bisexual, and Transgender Individuals. In. Rockville, MD: SAMHSA; 2012.

176. US Department of Housing and Urban Development. Equal Access for Transgender People: Supporting Inclusive Housing and Shelters. Available at: https://transequality.org/sites/default/files/docs/resources/Equal-Access-for-Transgender-People-Supporting-Inclusive-Housing-and-Shelters.pdf.

177. Ohio Recovery Housing. Best Practices for LGBTQ+ Inclusion in Recovery Housing. Available at: https://www.opioidlibrary.org/wp-content/uploads/2020/07/OH_BestPRacticesLGBTQRedoveryHousing.pdf.

178. Trans Care BC PHSA. *Gender-affirming Care for Trans, Two-Spirit, and Gender Diverse Patients in BC: A Primary Care Toolkit*. September 2017.

179. Farahmand P, Arshed A, Bradley MV. Systemic Racism and Substance Use Disorders. *Psychiatric annals.* 2020;50(11):494-498.

180. Matsuzaka S, Knapp M. Anti-racism and substance use treatment: Addiction does not discriminate, but do we? *Journal of ethnicity in substance abuse.* 2020;19(4):567-593.

181. Glass JE, Williams EC, Oh H. Racial/ethnic discrimination and alcohol use disorder severity among United States adults. *Drug Alcohol Depend.* 2020;216:108203.

182. Gilbert PA, Zemore SE. Discrimination and drinking: A systematic review of the evidence. *Social Science & Medicine.* 2016;161:178-194.

183. Hassen N, Lofters A, Michael S, Mall A, Pinto AD, Rackal J. Implementing Anti-Racism Interventions in Healthcare Settings: A Scoping Review. *International journal of environmental research and public health.* 2021;18(6):2993.

184. Bhatti-Sinclair K. *Anti-racist practice in social work.* Bloomsbury Publishing; 2011.

185. Matsuzaka S, Knapp M. 'Uncomfortable' is Not Enough: Integrating Anti-racism within Addiction Treatment. https://www.basisonline.org/2020/06/integrating-antiracism-addiction-treatment.html. Published 202. Accessed.

186. Forman RF, Nagy PD, Center for Substance Abuse T, Bookshelf N. *Substance abuse: clinical issues in intensive outpatient treatment.* Vol no. BKD 551.;47;no. BKD 551;47.;no. (SMA) 06-4182.;no. (SMA) 06-4182;. Rockville, MD: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment; 2006.

187. King M, Smith A, Gracey M. Indigenous health part 2: the underlying causes of the health gap. *Lancet.* 2009;374(9683):76-85.

188. Rowan M, Poole N, Shea B, et al. Cultural interventions to treat addictions in Indigenous populations: findings from a scoping study. *Subst Abuse Treat Prev Policy.* 2014;9:34.

189. Thomas LR, Donovan DM, Sigo RL, Austin L, Marlatt GA, Suquamish Tribe. The Community Pulling Together: A Tribal Community-University Partnership Project to Reduce Substance Abuse and Promote Good Health in a Reservation Tribal Community. *J Ethn Subst Abuse.* 2009;8(3):283-300.

190. Marsh TN, Marsh DC, Ozawagosh J, Ozawagosh F. The Sweat Lodge Ceremony: A Healing Intervention for Intergenerational Trauma and Substance Use. *Int Indig Policy J.* 2018;9(2).

191. Truth and Reconciliation Commission of Canada. *Truth and Reconciliation Commission of Canada: Calls to Action.* Winnipeg, MB2015.

192. Provincial Health Services Authority. *Dancing in Both Worlds: a Review of the Aboriginal Patient Liaison/Navigation Program in British Columbia.* 2015.

193. Aboriginal Health VCH. *Aboriginal Cultural Practices: A Guide For Physicians and Allied Health Care Professionals Working at Vancouver Coastal Health.*

194. Canadian Aboriginal AIDS Network and Interagency Coaltion on AIDS and Development. *Indigenous Harm Reduction = Reducing the Harms of Colonialism.* 2019.

195. The Canadian Institutes of Substance Use Research Research, Alberta Health Services, Ambrose Place. Come and sit and be at home: A report based on sharing circles with residents and staff from Ambrose Place. 2018. Available at: https://www.uvic.ca/research/centres/cisur/assets/docs/report-cmaps-ambrose-place.pdf.

196. First Nations Health Authority. *Fact Sheet: Indigenous Harm Reduction Principles and Practices.*

197. Kisely S, Asbridge M, Connor J, White A, Pais J, Lin E. Using administrative health data for the surveillance of interventions for alcohol-related harm among young people. *Canadian Medical Association Journal.* 2012;184(1):49-53.

198. Canadian HIV/AIDS Legal Network. *"Nothing About Us Without Us"—Greater, Meaningful Involvement of People Who Use Illegal Drugs: A Public Health, Ethical, and Human Rights Imperative.* Toronto, ON2005.

199. Centre for Addictions Research of BC. From One Alley to Another: Practice Guidelines to Better Include People who Use Drugs at your Decision-making Tables. University of Victoria; 2016. Available at: https://www.uvic.ca/research/centres/cisur/assets/docs/bulletin-14-from-one-ally-to-another.pdf.

200. Wettlaufer, A., Pauly, B., Brown, M., Chow, C., Vallance, K., Kauppi, C., Larocque, C., Stockwell, T., & Zhao, J. Towards alcohol harm reduction: Results from an evaluation of a Canadian Managed Alcohol Program. Victoria, BC: Canadian Institute for Substance Use Research. 2017.

201. Babor TF, Higgins-Biddle JC, Saunders J, Monteiro M. *The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care. Second Edition.* Geneva, Switzerland2001.

202. Maisto SA, McKay JR, Tiffany, ST. Diagnosis. In: Allen JP, Columbus M, eds. Assessing alcohol problems: A guide for clinicians and researchers. 2nd ed. Bethesda, MD: NIH; 2003: 55-74. NIH Publication No. 03–3745.

203. Sullivan JT, Sykora K, Schneiderman J, Naranjo CA, Sellers EM. Assessment of alcohol withdrawal - the revised clinical institute withdrawal assessment for alcohol scale (CIWA-Ar). *Br J Addict.* 1989;84(11):1353-1357.

204. Lee CS, Rosales R, Stein MD, et al. Brief Report: Low-Barrier Buprenorphine Initiation Predicts Treatment Retention Among Latinx and Non-Latinx Primary Care Patients. *The American journal on addictions.* 2019;28(5):409-412.

205. Winograd RP, Wood CA, Stringfellow EJ, et al. Implementation and evaluation of Missouri's Medication First treatment approach for opioid use disorder in publicly-funded substance use treatment programs. *J Subst Abuse Treat.* 2020;108:55-64.

206. Jakubowski A, Fox A. Defining Low-threshold Buprenorphine Treatment. *J Addict Med.* 2019.

207. Bush K, Kivlahan DR, McDonell MB, Fihn SD, Bradley KA. The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. *Archives of internal medicine.* 1998;158(16):1789-1795.

208. Stockwell T, Murphy D, Hodgson R. The Severity of Alcohol Dependence Questionnaire: Its Use, Reliability and Validity. Br J Addict. 1983;78(2):145-55.

209. Jones AW. Evidence-based survey of the elimination rates of ethanol from blood with applications in forensic casework. *Forensic Science International.* 2010;200(1-3):1-20.

210. Cowan JM, Burris JM, Hughes JR, Cunningham MP. The Relationship of Normal Body Temperature, End-Expired Breath Temperature, and BAC/BrAC Ratio in 98 Physically Fit Human Test Subjects. *Journal of Analytical Toxicology.* 2010;34(5):238-242.

211. Jones AW, Andersson L. Comparison of ethanol concentrations in venous blood and end-expired breath during a controlled drinking study. *Forensic Science International.* 2003;132(1):18-25.

212. Muncie HL, Yasinian Y, Oge' L. Outpatient management of alcohol withdrawal syndrome. *Am Fam Physician.* 2013;88(9):589-595.

213. McMicken D, Liss JL. Alcohol-Related Seizures. *Emergency Medicine Clinics of North America.* 2011;29(1):117-124.

214. Vaaramo K, Puljula J, Tetri S, Juvela S, Hillbom M. Predictors of new-onset seizures: a 10-year follow-up of head trauma subjects with and without traumatic brain injury. *Journal of Neurology, Neurosurgery & Psychiatry.* 2014;85(6):598-602.

215. Awissi DK, Lebrun G, Coursin DB, Riker RR, Skrobik Y. Alcohol withdrawal and delirium tremens in the critically ill: a systematic review and commentary. *Intensive Care Med.* 2013;39(1):16-30.

216. Eloma AS, Tucciarone JM, Hayes EM, Bronson BD. Evaluation of the appropriate use of a CIWA-Ar alcohol withdrawal protocol in the general hospital setting. *American Journal of Drug and Alcohol Abuse.* 2018;44(4):418-425.

217. Waye C, Wong M, Lee S. Implementation of a CIWA-Ar alcohol withdrawal protocol in a veterans hospital. *Southern Medical Journal.* 2015;108(1):23-28.

218. Knight E, Lappalainen L. Clinical Institute Withdrawal Assessment for Alcohol-Revised might be an unreliable tool in the management of alcohol withdrawal. *Can Fam Physician.* 2017;63(9):691-695.

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