Rapid Synthesis

Determining the Features of Managed Alcohol Programs

11 February 2019





McMaster HEALTH FORUM FORUM+



Rapid Synthesis:
Determining the Features of Managed Alcohol Programs
30-day response

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McMaster Health Forum and Forum+

The goal of the McMaster Health Forum, and its Forum+ initiative, is to generate action on the pressing health- and social-system issues of our time, based on the best available research evidence and systematically elicited citizen values and stakeholder insights. We aim to strengthen health and social systems – locally, nationally, and internationally – and get the right programs, services and products to the people who need them. In doing so, we are building on McMaster's expertise in advancing human and societal health and well-being.

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Timeline

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. This synthesis was prepared over a 30-business-day timeframe. An overview of what can be provided and what cannot be provided in each of the different timelines is provided on the McMaster Health Forum's Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response).

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Conflict of interest

The authors declare that they have no professional or commercial interests relevant to the rapid synthesis. The funder played no role in the identification, selection, assessment, synthesis or presentation of the research evidence profiled in the rapid synthesis.

Merit review

The rapid synthesis was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

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KEY MESSAGES

Questions

- How effective are managed alcohol programs in supporting individuals with severe alcohol-related problems reduce harm?
- What are the features of managed alcohol programs that have been implemented in Canada and select comparator countries?

Why the issue is important

- There are growing concerns globally about the health and social harms caused by alcohol.
- Increases in the global burden of disease attributable to alcohol highlight the importance of policies, programs and services aimed at reducing the harmful use of alcohol.
- Managed alcohol programs are a harm-reduction approach for people living with severe alcohol dependence (multiple and repeated attempts at detox and treatment) who often experience chronic homelessness or housing instability.
- The primary focus of managed alcohol programs is to reduce harms (e.g., minimization of antisocial behaviours, safely stabilizing consumption and replacing non-beverage alcohol with beverage alcohol), and some clients may choose to reduce consumption.
- This rapid synthesis was requested by NorWest Community Health Centres to synthesize the best available
 evidence on the effectiveness of managed alcohol programs to reduce harm for individuals with severe
 alcohol-related problems, and to understand the features of managed alcohol programs that have been
 implemented in Canada.

What we found

- We identified a total of nine relevant documents by searching four databases (Health Systems Evidence, Social Systems Evidence, Health Evidence and PubMed), including one systematic review, one scoping review, five primary studies, one relevant commentary and one report about the questions related to the effectiveness of managed alcohol programs in supporting individuals with severe alcohol-related problems.
- We also undertook a scan of managed alcohol program websites in all Canadian provinces and territories.
- One limitation we note is with respect to the limited amount of research evidence available on managed alcohol programs, however, research is currently being generated in the field by the Canadian Managed Alcohol Program study.
- Generally, the reviews and primary studies focused on: 1) guiding principles and dimensions of managed alcohol programs; 2) the effectiveness of programs in different settings; and 3) implementation considerations of managed alcohol programs, including costs.
- We found the following evidence for managed alcohol programs: 1) decreased number of beverage alcohol consumed per day; 2) increased safety and quality of life; 3) lower incidence of alcohol-related harm; 4) fewer police interactions; 5) decreased emergency-department visits and hospital admissions; 6) no significant individual or group-level differences in liver function tests; and 7) potential cost savings.
- We identified 23 managed alcohol programs in Canada, which are located in five provinces (British Columbia, Alberta, Saskatchewan, Manitoba and Ontario).
- All programs included an individualized approach whereby alcohol doses are tailored to the participants'
 needs and vary in terms of the range of supports offered (e.g., on-site mental health and primary-care
 services and peer employment opportunities).
- The majority of managed alcohol programs are funded through regional health authorities and to a lesser extent, from direct funding from federal, provincial and municipal governments.
- Residential supportive housing is the most common setting where managed alcohol programs are delivered.
- The types of health workers involved in managed alcohol programs include regulated health professionals (dietitians, licensed practical nurses, nurse practitioners, registered nurses, physicians, psychologists and social workers) and unregulated workers (case managers, healthcare aides and personal-care workers).

QUESTIONS

- How effective are managed alcohol programs in supporting individuals with severe alcohol-related problems reduce harm?
- What are the features of managed alcohol programs that have been implemented in Canada and in select comparator countries?

WHY THE ISSUE IS IMPORTANT

There are growing concerns globally of the health and social harms caused by alcohol.(1) The harmful use of alcohol resulted in approximately three million deaths worldwide in 2016 (5.3% of all deaths globally).(1) Increases in the global burden of disease attributable to alcohol highlight the importance of policies, programs and services aimed at reducing the harmful use of alcohol.

Managed alcohol programs are a harm-reduction approach for people living with severe alcohol dependence who often experience chronic homelessness or housing instability.(2; 3) Individuals in managed alcohol programs have had multiple and repeated attempts at detox and treatment, and often experience large gaps in health and social services. Managed alcohol programs provide controlled access to alcohol and replace non-beverage alcohol (e.g., mouthwash, handsanitizer and hairspray) among people for whom abstinence treatment has not worked.(3) The primary focus of managed alcohol programs is to reduce harms (e.g., minimization of antisocial behaviours, safely stabilizing consumption and replacing non-beverage alcohol with beverage alcohol), and some clients may choose to reduce consumption.(4)

Box 1: Background to the rapid synthesis

This rapid synthesis mobilizes both global and local research evidence about a question submitted to the McMaster Health Forum's Rapid Response program. Whenever possible, the rapid synthesis summarizes research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The rapid synthesis does <u>not</u> contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. An overview of what can be provided and what cannot be provided in each of these timelines is provided on the McMaster Health Forum's Rapid Response program webpage (www.mcmasterforum.org/find-evidence/rapid-response)

This rapid synthesis was prepared over a 30-business-day timeframe and involved four steps:

- submission of a question from a policymaker or stakeholder (in this case, the NorWest Community Health Centres);
- 2) identifying, selecting, appraising and synthesizing relevant research evidence about the question:
- drafting the rapid synthesis in such a way as to present concisely and in accessible language the research evidence; and
- finalizing the rapid synthesis based on the input of at least two merit reviewers.

The first managed alcohol program, Seaton House in Toronto, was created over 20 years ago as a response to a coroner's inquest that determined three homeless men froze to death after being turned away from shelters due to their alcohol dependence.(3) Managed alcohol programs were created as a way to reduce barriers to supportive housing by allowing controlled alcohol use, and to mitigate the acute, chronic and social harms related to alcohol dependence (e.g., diseases of the liver and pancreas, injury, family disruption and criminal convictions).(3; 5) The number of managed alcohol programs in Canada is increasing and they are offered in a range of settings (shelters, supportive housing and hospital-based) and for specific populations (chronically homeless, Indigenous peoples and seniors).

This rapid synthesis was requested by NorWest Community Health Centres to synthesize the best available evidence on the effectiveness of managed alcohol programs to reduce harm for individuals with severe alcohol-related problems, and to understand the features of managed alcohol programs that have been implemented in Canada.

WHAT WE FOUND

We identified a total of nine relevant documents by searching four databases (Health Systems Evidence, Social Systems Evidence, Health Evidence and PubMed), with the search strategy for these databases detailed in Box 2. In addition, we undertook a scan of managed alcohol program websites in all provinces and territories in Canada.

One limitation we note is with respect to the limited amount of research evidence available on managed alcohol programs. The only relevant systematic review that we identified was an 'empty review' where none of the potentially relevant studies met inclusion criteria. It is important to note that research is currently being generated in the field by the Canadian Managed Alcohol Program study, which includes an evaluation of the health and social outcomes of close to 400 participants (175 managed alcohol program participants and a higher number of controls) across five program sites in Canada.(3) The systematic review was conducted before the establishment and implementation of the Canadian Managed Alcohol Program study, which explains the 'empty review' as there was little research prior to the national study.

How effective are managed alcohol programs in supporting individuals with severe alcohol-related problems reduce harm?

We identified one systematic review, one scoping review, five primary studies, one relevant commentary and one report related to the effectiveness of managed alcohol

For each systematic review we included in the synthesis, we documented the focus of the review, key findings, last year the literature was searched (as an indicator of how recently it was conducted), methodological quality using the AMSTAR quality appraisal tool (see the Appendix for

from the included reviews and primary studies.

the AMSTAR quality appraisal tool (see the Appendix for more detail), and the proportion of the included studies that were conducted in Canada. For primary research (if included), we documented the focus of the study, methods used, a description of the sample, the jurisdiction(s) studied, key features of the intervention, and key findings. We then used this extracted information to develop a synthesis of the key findings

programs in supporting individuals with sever alcohol-related problems reduce harm. We use the term 'primary study' as a broad term for peer-reviewed, published single studies. Generally, findings from the included literature focused on: 1) guiding principles and dimensions of managed alcohol programs; 2) the effectiveness of programs in different settings; and 3) implementation considerations of managed alcohol programs, including costs.

In terms of principles and dimensions of managed alcohol programs we found one commentary and one primary study. (2; 6) The commentary outlined the operating principles of Ottawa Inner City Health's managed alcohol program, which has been in operation since 2001. (2) The program has grown to span two sites in a 'tiered service model' with a downtown managed alcohol program (28 beds) and a satellite shelter in supported housing (55 beds). The downtown site focuses primarily on stabilizing participants' alcohol consumption, linking them to key services, and helping them manage their behaviour. The satellite shelter is for participants who have stabilized at the downtown site. The five operating principles highlight the program's growth from a harm-reduction approach to a broader scope that includes supporting independent living. This includes:

- 1) alcohol administration being conditional on the participant not being visibly intoxicated (current program policy dictates that when a participant is intoxicated, they either retire to bed, miss a drink, or be removed from the premises for a duration of staff's discretion);
- 2) incorporate financial skills development as a means to help participants manage their alcohol consumption;
- 3) tailor alcohol dosing options (concentration, amount and frequency) to the individual;

Box 2: Identification, selection and synthesis of research evidence

We identified research evidence (systematic reviews and primary studies) by searching four databases in January 2019: Health Systems Evidence

(www.healthsystemsevidence.org), Social Systems Evidence (www.socialsystemsevidence.org), Health Evidence and PubMed. Across the four databases we conducted broad searches using "managed alcohol program" as a keyword. In addition, we searched: 1) organizational websites in Canada that are involved in managed alcohol programs; and 2) relevant publications of the World Health Organization. The results from the searches were assessed by one reviewer for inclusion. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

The results from the searches were assessed by one reviewer for inclusion. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

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- 4) create a trajectory for recovery (e.g., the satellite shelter serves to distance stabilized participants from the downtown core and has a stronger focus on developing skills for independent living as well as social connectivity); and
- 5) use a peer-leadership model that includes engaging peers in day-to-day community tasks (e.g., food preparation, cleaning, brewing beer and making wine that is consumed at both sites) and electing a leader who is responsible for raising concerns and suggesting changes to facility administrators on behalf of residents.(2)

In addition, one qualitative study identified six dimensions that collectively define the features of community managed alcohol programs, which include: 1) program goals and screening for eligibility (e.g., physicians or nurse practitioners administering the Alcohol Use Disorders Identification Test to screen participants, history of non-beverage alcohol consumption and binge drinking, long-term homelessness, frequent interactions with police or emergency-departments services, repeated attempts at abstinence and recurrent behavioural issues); 2) funding sources of managed alcohol programs (e.g., provincial funding, special grants or regional housing funds); 3) alcohol dispensing and administration (e.g., every 60 to 90 minutes, over a 13- to 14-hour period and a maximum of 11 to 12 doses daily); 4) food and accommodation (e.g., food services and permanent or supportive housing); 5) clinical monitoring by health professionals and linkage to primary-care services; and 6) social and cultural connections to activities both inside and outside of the program.(6) The study also found four key pillars of community managed alcohol programs, which include the following interventions: 1) alcohol; 2) housing or accommodation; 3) primary-care services; and 4) social and cultural (e.g., Indigenous knowledge or biomedical approach).

We identified one older high-quality systematic review and five primary studies that focused on the effectiveness of managed alcohol programs. (7-10; 12) The systematic review focused on determining the impact of managed alcohol programs as a standalone intervention compared to other interventions to address alcohol use (e.g., brief intervention, moderate drinking, no intervention or 12-step variants). (7) Following initial screening, 22 publications were selected to undergo full-text review, however, none of the publications met inclusion criteria and the review did not proceed beyond the literature search stage. (7; 11) The review concluded that a paucity of evidence on managed alcohol programs preclude conclusions regarding its utility and the authors hypothesize that the apparent lack of evidence may be explained by the limited number of managed alcohol programs.

The first primary study collected survey data from 175 patients enrolled at five different managed alcohol programs in Canada and found that the mean number of drinking days per month was highest for long-term managed alcohol program patients (28.74), followed by newly-enrolled patients (26.61), and controls (23.27).(8) Findings suggest that although long-term managed alcohol patients consumed a comparable total amount of alcohol per month to controls and newly-enrolled patients, their consumption was more spread out over each month, and long-term patients reported significantly lower incidence of alcohol-related harm across all 11 of the domains assessed.(8) The second primary study employed a mixed methods approach to understand the quality of life outcomes for Indigenous participants in the Kwae Kii Win Centre's managed alcohol program in Thunder Bay, Ontario. (12) Compared to controls, program participants experienced increased safety and improved quality of life when compared to what they considered to be alternative options (e.g., hospital or incarcerated).(12) The second primary study found that participants who acted as their own controls (e.g., on and off managed alcohol programs) when they were actively engaged in the managed alcohol program had: 1) 41% fewer total police contacts (and 33% fewer interactions that resulted in being taken into custody); 2) 32% fewer admissions to hospital; and 3) 87% fewer admissions to a detoxification service when compared to when they were not in the managed alcohol program. (9) When managed alcohol program participants were compared to controls, the estimates on police contacts, hospital admissions and emergency-department presentations were lower among managed alcohol program participants, but not statistically significant.(9)

The third study assessed the impact of a shelter-based managed alcohol program and found that:

• the number of drinks consumed per day by participants in the managed alcohol program was significantly lower compared to before entering the program (average drinks consumed per day dropped from 46 to eight after enrolment);

- staff-reported improved hygiene and nutrition;
- mean number of police reports filed per month for the subjects decreased from 18.1 to 8.8;
- mean number of emergency-department visits per month decreased from 13.5 visits to eight; and
- no significant individual or group-level differences in liver function tests from two years prior to enrolment in the managed alcohol program to those obtained during participation in the program.(10)

Finally, in terms of implementation considerations, we identified one recent medium-quality scoping review on the characteristics of community-based managed alcohol programs to determine the feasibility of implementing the program in acute-care hospital settings.(11) The review found supportive evidence of social and physical well-being (e.g., stabilized alcohol intake and reduced alcohol-related harm) outcomes of participants in community-based managed alcohol programs, suggesting potential benefits of implementing hospital-based inpatient programs. In addition, one primary study assessed the appropriateness of and potential cost savings from implementing a managed alcohol program in Sydney, Australia.(13) In a review of hospital records from the 12 months preceding interview data collection, authors identified a total of 191 hospital admissions, 109 residential withdrawal-unit stays, and 56 emergency-department visits among the 51 participants at a total cost of AUD\$1,612,348.(13) A 15-unit managed alcohol program would have resulted in potential cost savings of AUD\$926,483 assuming enrolment of the 15 participants with the greatest healthcare usage.(13) The 15-person managed alcohol program would have also eliminated AUD\$347,574 of crisis housing costs for that year.(13) Authors note that these savings do not account for capital costs associated with creating a managed alcohol program.

The Centre for Addictions Research of British Columbia conducted a cost-benefit analysis of the Kwae Kii Win Centre's managed alcohol program in Thunder Bay, Ontario.(14) The analysis compared the estimated annual social cost for managed alcohol program participants to two separate control groups. Examples of social costs included emergency-shelter utilization, inpatient, emergency-department usage and police-detention services. Overall the analysis found that when considering the societal costs of homelessness, the costs decreased by \$2,619 and \$6,284 when compared to the costs of program participants prior to beginning the program and to those in the control group.(14) The analysis also estimated that there was a saving of between \$1.09 and \$1.21 for every dollar invested in the managed alcohol program, as a result of decreases in health, social and legal-service utilization.(14)

What are the features of managed alcohol programs that have been implemented in Canada and in select comparator countries?

We provide a summary of the results of the jurisdictional scan in Table 2, and for each jurisdiction we describe (where possible) the features of managed alcohol programs. Specifically, we provide a general description of the program, followed by who funds the program (e.g., federal government, regional health authority or and/or municipality), where the program is delivered (e.g., inpatient, supportive housing, shelter or outreach) and to whom the program is provided (e.g., select populations). The Canadian Institute for Substance Use Research's Canadian Managed Alcohol Program Study provides information on program sites across Canada and conducted an overview of managed alcohol programs in August 2018.(3; 15) The jurisdictional scan draws on the overview by using the programs listed as the starting point for purposeful sampling of key websites in each jurisdiction. Given the size of some of the programs and limitations in publicly available information about them, Table 1 may not provide comprehensive details of managed alcohol programs in Canada, but rather a broad overview of them.

As part of the jurisdictional scan, the requestor of the rapid synthesis was also interested in details of managed alcohol programs in other countries. To our knowledge, there are no managed alcohol programs in operation outside of Canada, although some countries such as Australia (as noted above) are considering the implementation of such programs.(13) We did find several media reports that indicate that managed alcohol programs are drawing attention outside of Canada.(16-18)

We identified 23 managed alcohol programs in Canada, which are located in five provinces (British Columbia, Alberta, Saskatchewan, Manitoba and Ontario). All programs included an individualized approach whereby alcohol doses are tailored to the participants' needs. Wine and to a lesser extent beer are the types of alcohol provided by the programs, with one program offering exchanges of non-beverage alcohol for low-cost wine or beer.(19) Approaches to alcohol dosage varies by program, from a maximum of three daily doses,(20) to a dose every 90 minutes from 8 a.m. to 11 p.m.(21-26) For the latter approach, participants are monitored and assessed 60 minutes prior to receiving their next dose to ensure they are not overly intoxicated.(21; 22) Services offered within managed alcohol programs also vary in terms of the range of supports offered. Some programs include on-site mental health and primary-care services and peer employment opportunities.(19; 24; 27-29)

In terms of funding of managed alcohol programs, the majority are funded through regional health authorities. Two municipalities (Lethbridge, Alberta and Toronto, Ontario) play a role in funding two of the managed alcohol programs we reviewed.(25; 26; 30) To a lesser extent, the federal and provincial governments (e.g., through project grants allocated to organizations providing programs) and the Canadian Mental Health Association play a role in directly funding select managed alcohol programs.(15; 21; 22) It is important to note that some programs require contributions from the participants either through co-pay, contributions through social assistance amounts or fees for alcohol consumed.(15; 21; 22; 25; 26; 31)

Residential supportive housing is the most common setting where managed alcohol programs are delivered. Other settings included shelters, day programs such as drop-in centres, and community outreach (including delivery to participant's homes).(23-26; 32-34) In addition, we identified one hospital-based inpatient program at St. Paul's Hospital in Vancouver.(35)

Details on the health professionals involved in delivering care in managed alcohol programs was difficult to find and often not included within the program description. For the programs that did provide this information, the types of health workers involved in managed alcohol programs include regulated health professionals (dietitians, licensed practical nurses, nurse practitioners, registered nurses, physicians, psychologists and social workers) and unregulated workers (case managers, healthcare aides and personal-care workers).

Lastly, with regards to whom programs are made available to, many have specific eligibility criteria (e.g., people with severe alcohol use) and are targeted to select populations with eight of the programs being focused on homeless individuals, (21-23; 28-31; 33; 36), four tailored to seniors, (20; 27; 30; 37) and three being provided to Indigenous peoples. (20; 32; 38)

During the jurisdictional scan process, we identified policy-related documents for the creation or expansion of managed alcohol programs in British Columbia, Manitoba and the Yukon. As part of the Second Generation Strategy, Vancouver Coastal Health supports the creation of new safe-consumption programs, including managed alcohol programs.(39) A recent feasibility report on managed alcohol programs in Manitoba, which included community consultations, found that stakeholders were overall supportive of implementing the program.(40) Implementation considerations focused on principles of cultural appropriateness (e.g., centred on Indigenous knowledge), harm reduction and trauma-informed care.(40) Additional considerations included minimizing barriers to access (e.g., self-referral and geographically accessible), providing drop-in options, using individualized alcohol distribution and providing interprofessional care (e.g., from dietitians, psychotherapists and occupational therapists).(40) In Yukon, a recent community-based action plan that was focused on addressing homelessness identified the development of managed alcohol programs as part of the recommended key actions.(41)

Table 1. Summary of managed alcohol programs in Canada (findings based on the Canadian Institute for Substance Use Research's "Overview of Managed Alcohol Program (MAP) sites in Canada")(15)

Province or territory	Description of the program	Who funds the program	Where is the program delivered	By whom is the program delivered	To whom is the program provided
British Columbia	Substance Use Program* (Kelowna) (34) • Treatment is tailored based on individual needs (15)	Interior Health	Non-residential – individual case management	Not specified	Six participants
	Street Entrenched Managed Alcohol Program (Vancouver) (42) Tailored doses and dispensing schedule Exchange of non-beverage alcohol for low-cost beer and wine (capacity to exchange 30 liters of non-beverage alcohol per week) Peer employment opportunities through brew co-op (e.g., brewing of beer and wine from kits for participant use) Weekly support meetings and seminars Connections to housing and health services, psychosocial and cultural supports	Program is a cooperative and participants 'buy-in' or pay dues Centre of Alcohol Exchange Program supplements program	Non-residential - day programs and community outreach	Program is overseen by the medical director (family physician) Program is linked with PHS Primary Care Services (multidisciplinary team consisting of physicians, specialists, nurses and social workers) Community outreach including well-being and hydration checks for those who are homeless	100 participants (people with severe alcohol dependence) per week Street entrenched members of the community
	Managed Alcohol Program, Station Street (Vancouver) (19) • Tailored doses hourly from 7:30 a.m. to 10:30 p.m.	Vancouver Coastal Health Authority (15)	Residential - supportive transitional housing (Station Street) (43) 80 units	Program is clinically supervised	Four participants Housing for new families and youth
	Substance Use Program (Vancouver) (35) Rapid Access Addiction Clinic for patients with substance use disorders including: opioid use disorder; alcohol use disorder/alcoholism; benzodiazepine dependent;	Providence Health Care	Hospital-based - inpatient (St. Paul's Hospital)	Physician, nurse and/or social worker	City-based populations with complex health problems

Province or territory	Description of the program	Who funds the program	Where is the program delivered	By whom is the program delivered	To whom is the program provided	
	nicotine addiction; stimulant addiction • Treatment is tailored based on individual needs (15)					
Alberta	Complex Mental Health/Harm Reduction Program, Carewest Rouleau Manor (Calgary) (44) Treatment is tailored based on individual needs (15)	Alberta Health Services	Long-term residential care 17 beds to support addictions and complex mental health	Not specified	Not specified	
	Peter Coyle Place (Calgary) (37) • Housing and support services using a harm- reduction approach through the managed alcohol program	Residents pay and the program is subsidized by Alberta Human Services (15)	Residential - supportive housing	In-home services delivered by physicians and nurse practitioners	Individuals 55 and older who are unable to access traditional seniors' housing Between 20-30 individuals in the Managed Alcohol Program (15)	
	Ambrose Place (Edmonton) (38)	Alberta Health Services	Residential - supportive housing 28 units	Registered Nurses, Indigenous elders, knowledge keepers, and counsellors	Indigenous peoples	
	Place of Dignity, George Spady Society (Edmonton) (36) Stable living harm-reduction project	Alberta Health Services Homeward Trust (15)	Residential - supportive housing	Licensed practical nurse, healthcare aides and supervisor providing 24- hour supervision	Spaces for six homeless individuals with medical and mobility needs Criteria for admission include: chronically homeless; active and continued addiction; chronic medical and mental health condition(s); requires barriers-free environment; user of inner-city services; and high user of emergency and inpatient services	
	Grand Manor (Edmonton) (27) • Harm-reduction program for people with severe alcohol use	Alberta Health Services	Residential - supportive housing 21 units for individuals with alcohol dependencies	Registered nurse, licensed practical nurses, personal- care workers/healthcare aides and an Alberta Health Services care manager	Seniors	

Province or territory	Description of the program	Who funds the program	Where is the program delivered	By whom is the program delivered	To whom is the program provided
				Weekly visits by a physician, psychologist and psychiatrist	
	Urban Manor Housing Society* (Edmonton) (31) • Daily ration of alcohol, which residents are responsible for purchasing	Alberta Human Services (15)	Residential - assisted living facility	Not specified	Males who are chronically homeless
	River House (Lethbridge) (30) • Housing and support services using a harm- reduction approach through the managed alcohol program	City of Lethbridge	Residential - permanent supportive housing	On-site case manager	Chronically ill homeless seniors
Saskatchewan	The Lighthouse Supported Living* (Saskatoon) (20) • Piloting a managed alcohol program, which includes individualized dosing of up to three daily doses (15)	Pilot funded through a partnership between the Ministry of Social Services, Journey Home Housing First Program and Saskatoon Crisis Intervention Service (15)	Residential - supportive housing	Not specified	Senior Indigenous males with a history of severe alcohol use
	Phoenix Residential Society* (Regina) (32) Treatment/dosing is tailored based on individual needs, which can be picked up or delivered to the participant's home up to four times daily (15)	• Federal government's Homelessness Partnership Strategy (15)	Non-residential - drop-in and outreach	Not specified	Indigenous males Participants must be within the Phoenix Homes Housing First Program (15)
Manitoba	Sunshine House*	None identified	None identified	None identified	None identified
Ontario	Main Street Project* Special Care Unit, Wesley	None identified	None identified	None identified	None identified
Ontario	(Hamilton) (33) • Not specified	Local Health Integration Network (15)	Residential and outpatient services	Not specified	Homeless individuals who have severe alcohol use
	Morningstar Center, Lake of the Woods District Hospital (Kenora) (29) • Participants receive moderate amounts of alcohol within the residence and supports for	Local Health Integration Network (15)	Residential - provisional housing	Physician, mental health and addictions counsellors and dietitians	Individuals who have prolonged homelessness and severe alcohol use

Province or territory	Description of the program	Who funds the program	Where is the program delivered	By whom is the program delivered	To whom is the program provided
	reconnection to the community				
	The Oaks, Shepherds of Good Hope (Ottawa) (24) • Majority of residents are in the managed alcohol program, which is designed to stabilize participants through regulated alcohol administration • The program has two-steps: 1) stabilize participants' alcoholism; and 2) once stable transfer to a shelter-based managed alcohol program • Participants receive a medically prescribed hourly dosage of wine for 15	Local Health Integration Network (15) Operates in partnership with Inner City Health Inc.	Two programs: o residential - supportive housing (28 beds); and o shelter (55 beds)	Medical and mental health services	Not specified
	hours a day Harm Reduction Home Residential Program (Sudbury) (23) Managed alcohol program coupled with primary-care and mental health supports Tailored doses hourly from 9 a.m. to 8 p.m.	Local Health Integration Network and Canadian Mental Health Association Co-pay by participants (15)	Non-residential - day program	Not specified	Individuals at risk of homelessness or who are homeless and have severe alcohol use
	9 a.m. to 8 p.m. Kwae Kii Win Managed Alcohol Program, Shelter House (Thunder Bay) (21; 22) • Participants receive one (six-ounce) alcoholic drink (white wine) every 90 minutes from 8 a.m. to 11 p.m. • Participants are assessed 60 minutes prior to receiving their next dose to ensure they are not overly intoxicated	Contributions from participants through their social assistance amounts Federal and provincial project grants	Residential - supportive housing	Nurse practitioner	Homeless individuals with severe alcohol use

Province or territory	Description of the program	Who funds the program	Where is the program delivered	By whom is the program delivered	To whom is the program provided
	Annex Harm Reduction Program, Seaton House* (Toronto) (25; 26) Managed alcohol program with tailored doses between 7:30 a.m. to 11 p.m.	City of Toronto Participants pay a fee for wine consumed	Residential - shelter Capacity for 100 individuals	Case management services	Males 18 years and older who are ineligible for services in other programs due to severe alcohol use
	Art Manuel House (Toronto) (28) • 24-hour managed alcohol program within a family-style home	Local Health Integration Network (15)	Residential - supportive housing	Psychiatric services and intensive case management	19 years and older, homeless and have severe alcohol use
Quebec	None identified	None identified	None identified	None identified	None identified
New Brunswick	None identified	None identified	None identified	None identified	None identified
Nova Scotia	None identified	None identified	None identified	None identified	None identified
Prince Edward Island	None identified	None identified	None identified	None identified	None identified
Newfoundland and Labrador	None identified	None identified	None identified	None identified	None identified
Yukon Territory	None identified	None identified	None identified	None identified	None identified
Northwest Territories	None identified	None identified	None identified	None identified	None identified
Nunavut	None identified	None identified	None identified	None identified	None identified

^{*} Unable to find program details from websites.

REFERENCES

- 1. WHO. Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018.
- 2. Muckle J, Muckle W, Turnbull J. Operating principles from Ottawa's managed alcohol program. *Drug and Alcohol Review* 2018; 37(Suppl 1): S140-S142.
- Canadian Institute for Substance Use Research. The Canadian Managed Alcohol Program Study (CMAPS). Victoria: University of Victoria; 2018. https://www.uvic.ca/research/centres/cisur/projects/map/index.php (accessed 29 January 2019).
- 4. CIHI. Alcohol harm in Canada: Examining hospitalizations entirely caused by alcohol and strategies to reduce alcohol harm. Ottawa: Canadian Institute for Health Information; 2017.
- 5. Rehm J. The risks associated with alcohol use and alcoholism. *Alcohol Research & Health* 2011; 34(2): 135.
- 6. Pauly B, 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.
- 7. 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.
- 8. Stockwell T, Pauly B, 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.
- 9. 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.
- 10. 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.
- 11. 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(Suppl 1): S145-S155.
- 12. 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.
- 13. Ezard N, Cecilio ME, 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(Suppl 1): S184-S194.
- 14. Hammond K, Gagne L, Pauly B, Stockwell T. A cost-benefit analysis of a Canadian managed alcohol program. Vancouver: Centre for Addictions Research of British Columbia; 2016.
- 15. Canadian Institute for Substance Use Research. Overview of Managed Alcohol Program (MAP) sites in Canada. Victoria: University of Victoria; 2018.

 https://www.uvic.ca/research/centres/cisur/assets/docs/resource-overview-of-MAP-sites-in-Canada.pdf (accessed 29 January 2019).

- 16. Bains C. Managed alcohol programs in Canada are getting worldwide attention. Huffpost. 2018. https://www.huffingtonpost.ca/2018/02/28/managed-alcohol-programs-in-canada-are-getting-worldwide-attention_a_23373317/ (accessed 29 January 2019).
- 17. Pressly L. Treating alcoholics with wine. BBC News. 2016. https://www.bbc.com/news/magazine-36717557 (accessed 29 January 2019).
- 18. Rosenberg T. The shelter that gives wine to alcoholics. The Guardian. 2016. https://www.theguardian.com/society/2016/apr/26/homeless-shelter-ottawa-gives-wine-to-alcoholics (accessed 29 January 2019).
- 19. Station Street. Community managed alcohol program. Vancouver: PHS Community Services Society; 2019. https://www.phs.ca/project/community-managed-alcohol-program/ (accessed 29 January 2019).
- 20. The Lighthouse Supported Living. Implement community alcohol reduction programs. Saskatoon: The Lighthouse Supported Living; 2019.

 https://www.lighthousesaskatoon.org/services/housingplus/supportedliving/ (accessed 29 January 2019).
- 21. Shelter House. Kwae Kii Win Managed Alcohol Centre. Thunder Bay: Shelter House; 2019. http://www.shelterhouse.on.ca/article/kwae-kii-win-managed-alcohol-centre-497.asp (accessed 29 January 2019).
- 22. Pauly B, Stockwell T, Chow C, et al. Towards alcohol harm reduction: Preliminary results from an evaluation of a Canadian managed alcohol program. Victoria: Centre for Addictions Research of British Columbia; 2013.
- 23. CMHA Sudbury/Manutoullin. Harm Reduction Home (HRH) Residential Program. Sudbury: Canadian Mental Health Association; 2017. https://sm.cmha.ca/programs-services/harm-reduction-home-hrh-day-program/ (accessed 29 January 2019).
- 24. Shepherds of Good Hope. The Oaks. Ottawa: Shepherds of Good Hope; 2019. https://www.sghottawa.com/the_oaks/ (accessed 29 January 2019).
- 25. City of Toronto. Seaton House by the numbers. Toronto: City of Toronto; 2019. https://www.toronto.ca/city-government/accountability-operations-customer-service/long-term-vision-plans-and-strategies/george-street-revitalization/seaton-house-by-the-numbers/ (accessed 29 January 2019).
- 26. CentralEasthealthline.ca. Annex Harm Reduction Program. Toronto: CentralEasthealthline.ca; 2019. https://www.centraleasthealthline.ca/displayservice.aspx?id=133555 (accessed 29 January 2019).
- 27. Excel Society. Grand Manor. Edmonton: Excel Society; 2019. http://www.excelsociety.org/care-options/grand-manor/ (accessed 29 January 2019).
- 28. ConnexOntario. Art Manuel House. Toronto: ConnexOntario; 2019. https://www.connexontario.ca/drug-alcohol-addictions-service-toronto-19566 (accessed 29 January 2019).
- 29. NorthWesthealthline.ca. Lake of The Woods District Hospital Morningstar Centre Managed Alcohol Program. Toronto: NorthWesthealthline.ca; 2019. https://www.northwesthealthline.ca/displayservice.aspx?id=173381 (accessed 29 January 2019).
- 30. Social Housing in Action. River House. Lethbridge: Social Housing in Action; 2019. http://www.bringinglethbridgehome.ca/hf-manual/river-house (accessed 29 January 2019).

- 31. A Place for Mom. Urban Manor Housing Society. Edmonton: A Place for Mom; 2018. https://www.assistedliving.com/alberta/edmonton/urban-manor-housing-society/ (accessed 29 January 2019).
- 32. Phoenix Residential Society. Phoenix housing & support services & Phoenix approved home support services. Regina: Phoenix Residential Society; 2019. https://phoenixregina.com/program-descriptions/phoenix-housing-support-services-phass-phoenix-approved-home-support-services-pahss/ (accessed 29 January 2019).
- 33. Wesley. Special Care Unit. Hamilton: Wesley; 2019. https://wesley.ca/services/housing-homelessness/harold-e-ballard-special-care-unit/ (accessed 29 January 2019).
- 34. Interior Health Authority. Mental health and substance use. Kelowna: Interior Health Authority; 2019.

 https://www.interiorhealth.ca/YourCare/MentalHealthSubstanceUse/SubstanceUse/Pages/default.aspx (accessed 29 January 2019).
- 35. Providence Health Care. Substance use services. Vancouver: Providence Health Care; 2017. http://www.providencehealthcare.org/substance-use-services (accessed 29 January 2019).
- 36. George Spady Society. Place of Dignity. Edmonton: George Spady Society; 2019. http://www.gspady.org/place-of-dignity-pod/ (accessed 29 January 2019).
- 37. Trinity Place Foundation of Alberta. Peter Coyle Place. Calgary: Trinity Place Foundation of Alberta; 2019. http://tpfa.ca/peter-coyle-place-2/ (accessed 29 January 2019).
- 38. NiGiNan Housing Ventures. Welcome to Ambrose Place. Edmonton: NiGiNan Housing Ventures; 2019. https://niginan.squarespace.com/welcome-to-ambrose-place/ (accessed 29 January 2019).
- 39. Vancouver Coastal Health. A second generation health system strategy for Vancouver's downtown eastside. Vancouver: Vancouver Coastal Health; 2018. http://dtes.vch.ca/wp-content/uploads/sites/6/2013/12/DTES Directions Paper 1-Final2.pdf (accessed 20 February 2019).
- 40. Sunshine House. 2018 managed alcohol programs in Manitoba feasibility report. Winnipeg: Sunshine House; 2018. https://sunshinehousewpg.org/tag/managed-alcohol-program/ (accessed 29 January 2019).
- 41. Yukon Health and Social Services. Safe at home: A community-based action plan to end and prevent homelessness in Whitehorse. Whitehorse: Yukon Health and Social Services; 2017. http://www.hss.gov.yk.ca/pdf/Safe_at_Home-Report.pdf (accessed 29 January 2019).
- 42. Drug Users Resource Centre. Who we are. Vancouver: Drug Users Resource Centre; 2018. http://www.durc.rocks/about (accessed 20 February 2019).
- 43. PHS. Community managed alcohol program. Vancouver: PHS Community Services Society; 2019. https://www.phs.ca/project/station-street/ (accessed 29 January 2019).
- 44. Carewest Innovative Health Care. Carewest Rouleau Manor. Calgary: Carewest Innovative Health Care; 2019. http://carewest.ca/dir/carewest-rouleau-manor/ (accessed 29 January 2019).
- 45. 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.

APPENDICES

The following tables provide detailed information about the systematic reviews and primary studies identified in the rapid synthesis. The ensuing information was extracted from the following sources:

- systematic reviews the focus of the review, key findings, last year the literature was searched, and the proportion of studies conducted in Canada; and
- primary studies the focus of the study, methods used, study sample, jurisdiction studied, key features of the intervention and the study findings (based on the outcomes reported in the study).

For the appendix table providing details about the systematic reviews, the fourth column presents a rating of the overall quality of each review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered "high scores." A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. Health Research Policy and Systems 2009; 7 (Suppl1):S8).

All of the information provided in the appendix tables was taken into account by the authors in describing the findings in the rapid synthesis.

Appendix 1: Summary of findings from systematic reviews about managed alcohol programs

Type of review	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportio n of studies that were conducted in Canada
Scoping review	Identifying factors that are relevant to the implementation of managed alcohol programs in hospitals (11)	Alcohol-use disorders are among the most prevalent health conditions globally, with prevalence rates of alcohol dependence or harmful alcohol consumption estimated to be as high as 16%, and socio-economically marginalized groups being particularly vulnerable. The implementation of managed alcohol programs in hospital settings would provide a means of stabilizing inpatients suffering from acute alcohol withdrawal who are not responding sufficiently to pharmacological treatment with benzodiazepines. The review aimed to glean insights from community-based managed alcohol programs to determine whether a managed alcohol program in an acute-care hospital setting would be feasible. A comprehensive search of grey literature and academic databases yielded 1,725 records to be screened, with 42 studies being included in the scoping review. Of the included studies, 28 examined the efficacy of administering alcohol in a hospital setting to prevent alcohol-withdrawal syndrome. Results among trials in this area were generally positive, with five of six trials finding that alcohol administration was effective or non-inferior to other treatments. Intravenous, oral, and nasogastric ethanol administration were all found to be effective at managing alcohol withdrawal in a hospital setting. The review included 14 studies that focused on managed alcohol programs (all in community-based settings). Many of the included studies were qualitative, and there were no quantitative studies that directly compared managed alcohol programs to other treatment models for alcohol use disorder. A quasi-experimental study with pre- and post-analysis found that a managed alcohol program in Toronto had promising harm-reduction impacts, namely reductions in hospital admissions, detox-centre visits, and police encounters. A different study assessed alcohol consumption and alcohol-related harm as primary outcomes and also obtained results supporting the effectiveness of managed alcohol programs. One case study identified managed alcohol programs as "	Not provided	5/9 AMSTAR Rating Provided by the McMaster Health Forum	15/42
Systematic review and meta-analysis	Assessing the efficacy of managed alcohol for harm	Addiction to alcohol can result in major medical and socio-economic harm. In Canada, 2.6% of the population is dependent on alcohol. Rates of alcohol dependence are significantly higher in vulnerable populations, notably those with mental illness and those in low-income households.	2012	6/7 AMSTAR Rating	0/0

reduction among high-risk		Provided	
populations (7)	The review aimed to determine the impact of managed alcohol programs as a standalone and when	by the	
	compared with other interventions for alcohol use among high-risk populations: moderate self-	McMaster	
	controlled drinking, brief harm-reduction interventions, and 12-step programs (abstinence-oriented).	Health	
	Primary outcomes targeted by the review protocol were reduction in mortality, incarceration rates,	Forum	
	medication noncompliance, and harmful behaviour (i.e., violence, substance use, binge drinking, and		
	drinking alcohol not intended for human consumption).		
	The review screened 2,336 publications with an amalgamated pool of 16,650 participants. Following		
	initial screening, 22 publications were selected to undergo full-text review. Ultimately, none of the 22		
	publications reviewed in full met inclusion criteria and the review did not proceed beyond the literature		
	search stage. Reasons for study exclusion varied, however, nearly all of the studies did <i>not</i> include a		
	managed alcohol program. One publication did examine managed alcohol, however, it was a narrative		
	account of one person's experience entering a managed alcohol program and did not provide an		
	evaluation of the program.		
	The review concluded that a paucity of evidence on managed alcohol programs preclude conclusions		
	regarding their utility when compared with other interventions for alcohol dependence or on its own.		
	Authors hypothesize that the apparent lack of evidence may be explained by the rarity of managed		
	alcohol programs.		

Appendix 2: Summary of findings from primary studies about managed alcohol programs

Focus of study	Study characteristics	Sample description	Key features of the	Key findings
·	•		intervention(s)	, 8
Exploring whether managed alcohol can reduce harm among those with severe alcohol dependence (8)	Publication date: 2018 Jurisdiction studied: Canada Methods used: Cross- sectional survey with multivariate logistic regression	Survey data was collected from 175 patients enrolled at five different managed alcohol programs (Toronto, Ottawa, Hamilton, Thunder Bay and Vancouver), as well as 189 controls from drop-in centres and shelters located in the same city who met eligibility criteria to enroll in a managed alcohol program, but never have.	Features of the intervention varied between the five sites, however all programs involved on-site provision of alcohol to participants at a regular interval (usually once per hour) from 7:00-7:30 a.m. to 9:30-11:00 p.m. Three of the programs (Toronto, Ottawa, and Hamilton) tailored alcohol dosing quantity and/or frequency on a case-by-case basis, whereas the Thunder Bay and Vancouver sites did not dispense alcohol when a patient was visibly intoxicated, and two of the sites imposed a minimum amount of time a client must be on site (60 minutes, and three hours) before receiving alcohol. All five managed alcohol programs were hosted at a shelter or residential facility.	Findings were separated based upon whether a patient was newly-enrolled in one of the managed alcohol programs (≤ two months mean of 0.9 months, n=65 patients) or long-term managed alcohol program patients (≥ 2 months, mean of 26.62 months, n=110 patients). The majority of patients in both the newly-enrolled and long-term groups were males, and mean age was similar (52.78 years among the newly-enrolled group and 50.38 years among the long-term group). There were no significant differences in the ethnicity or sex of newly-enrolled versus long-term patients, however, newly-enrolled managed alcohol program patients were found to have significantly worse housing stability scores as assessed using the Canadian Definition of Homelessness (scores were similar to those of controls). Severity of alcohol dependence was found to be similar between controls and newly-enrolled managed alcohol program patients, and long-term managed alcohol patients were found to have significantly lower dependence. The mean number of drinking days per month was highest for long-term managed alcohol program patients (28.74), followed by newly-enrolled patients (26.61), and controls (23.27). The mean number of Canadian standard drinks per day over the preceding 30 days showed a different trend and was highest among newly-enrolled managed alcohol program patients (18.84), followed by controls (17.67), and was lowest among long-term patients (14.83). Similarly, the mean number of non-beverage alcoholic drinks consumed per day was highest among newly-enrolled patients (3.45), followed by controls (2.60), and was lowest among long-term patients (14.83). Similarly, the mean number of non-beverage alcoholic drinks consumed per day was highest among newly-enrolled patients per day than controls due to the eligibility criteria for initial enrolment into the managed alcohol programs. Findings suggest that though long-term managed alcohol patients consumed a comparable total amount of alcohol per month to controls and newly-enrolled patients, thei

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				Authors acknowledge their findings are limited by a lack of randomization and selection bias (given the participants most predisposed to success with less severe alcohol dependence may be the ones who elect to remain in the program for longer durations).
Examine the desire for a managed alcohol	Publication date: 2018	A total of 51 participants were interviewed in a	Authors carried out structured, in-person	Abstinence-focused housing services for those dependent on alcohol can pose numerous difficulties. Authors found that repeated unsuccessful attempts at
program in Sydney and	7 . 7	residential short-stay	interviews with all study	abstinence correlated with greater frequency and severity of psychiatric and
its potential cost savings	Jurisdiction studied:	alcohol-withdrawal unit	participants following	neurological alcohol-withdrawal complications, and that some who visit
(13)	Australia	at St. Vincent's Hospital	initial assessment for	abstinence-focused shelters may binge drink before entering. As such, this study
		in Sydney. In order to participate, subjects had	eligibility criteria by facility and study staff. As part of	aimed to assess the appropriateness of and potential cost savings from implementing a managed alcohol program in Sydney.
	Methods used: Structured	to: 1) be homeless; 2) be	the interview, the Alcohol	implementing a managed alconol program in Sydney.
	interviews	aged 18 years or older; 3)	Use Disorders	Authors found a majority of interview respondents indicated interest in joining
	interviews	resided at the short-stay	Identification Test was	a managed alcohol program. Preferences varied depending on the service-
		unit for at least 24 hours;	administered to determine	delivery model, though these differences were not significant. A hostel where
		and 4) have identified	severity of alcohol use.	participants could consume their own alcohol was the most popular model
		alcohol as their primary	severity of alcohol age.	among interview respondents, with 76% expressing interest in enrolling. Second
		drug of concern. The	The interview script	to this was a hostel model where participants would be provided one standard
		majority of participants	included questions	drink per hour (69% of respondents in support). A day-centre model where
		interviewed were male	pertaining to the feasibility	participants could consume their own alcohol earned 63% support, and a day-
		English speakers born in	and acceptability of a	centre model where participants would be provided one standard drink per
		Australia, with median	managed alcohol program.	hour was the least favoured among survey participants, with 53% expressing
		age of 44 years. The	These questions focused	interest.
		median length of	on preferences for	
		homelessness at the time	different service delivery	Nearly all participants voiced willingness to contribute a significant portion of
		of interview was 10	models and	their income in return for enrolment in a managed alcohol program. Across the
		months and ranged from	implementation	four proposed service delivery models, a contribution of 25% of income was
		0 to >500 months.	considerations, such as a	the most preferred response. Participants indicated willingness to contribute a
		When assessed with the	potential location for the	greater portion of their income for hostel-based services compared to day
		Alcohol Use Disorders	program. Additionally,	centres, and for programs where they could consume their own alcohol rather
		Identification Test, 49 of	interviewers collected data	than being provided one standard drink per hour. For the most popular option,
		the 51 survey	on what percentage of	a hostel-based managed alcohol program where participants could consume
		respondents scored in a range indicating alcohol	income, if any, participants would be willing to pay to	their own alcohol, 20% of survey respondents indicated that they would be willing to contribute 75% or more of their total income, and an additional 27%
		dependence, while the	take part in a managed	of respondents indicated they would be willing to contribute 50% of their total
		remaining two	alcohol program.	income. For a hostel model where participants would be provided one standard
		participants scored	aconor program.	drink per day, 47% of interview respondents indicated they would be willing to
		below dependence but	Subsequently, authors	contribute >50% of their total income.
		still in the hazardous	collected administrative	
		alcohol consumption	data from St. Vincent's	On review of hospital records for the 12 months preceding interview data
		range. Of all participants,	Hospital for all 51	collection, authors identified a total of 191 hospital admissions, 109 residential
		28% had consumed non-	participants to analyze the	withdrawal-unit stays, and 56 emergency-department visits among the 51
		beverage alcohol (most	potential cost savings of a	participants. Total cost was AUD\$1,612,348. A 15-unit managed alcohol

Focus of study	Study characteristics	Sample description	Key features of the	Key findings
			intervention(s)	
		frequently methylated spirits).	15-bed managed alcohol program.	program would have resulted in savings of AUD\$926,483 for that year assuming it enrolled the 15 respondents with the greatest healthcare usage. The 15-person managed alcohol program would have also eliminated AUD\$347,574 of crisis housing costs for that year. These savings do not account for capital costs associated with creating a managed alcohol program. Authors conclude that there is demand for a managed alcohol program in
				Sydney and that its implementation would result in significant cost savings, though a comprehensive economic evaluation is required.
Determining whether managed alcohol programs reduce harm or change drinking behaviours (9)	Publication date: 2016 Jurisdiction studied: Canada Methods used: Qualitative and quantitative surveys, structured interviews and a records review	Intervention participants were recruited from the Kwae Kii Win Centre's 15-bed managed alcohol program, for both men and women, in Thunder Bay, Ontario. All intervention participants enrolled in the study self-identified as being Indigenous. Controls were recruited from a separate shelter facility next door to the Kwae Kii Win Centre and overseen by the same agency (Shelter House). To be enrolled as a control, a participant had to meet the criteria to be eligible for intake by the managed alcohol program treatment at the Kwae Kii Win Centre, but not currently enrolled in the program. Demographic differences	The managed alcohol program at the Kwae Kii Win Centre targets those who frequently consume non-beverage alcohol and have long histories of homelessness. Participants are provided housing, food and groceries, financial counselling, linkage to onsite primary care and counselling, and "life skills training." Participants receive one 20.46 ml drink (12% EtOH by volume) every 90 minutes from 8 a.m. until 11 p.m. Participants must be present at the Centre for at least 60 minutes before a drink is provided, and a drink will not be provided to those who appear visibly intoxicated. Participants in the program have the option of taking	Participants in the managed alcohol program consumed alcohol on significantly more days per month than controls (27.8 days/month compared to 22.6 days/month). This difference was further exaggerated upon six-month follow-up. The number of drinks consumed on days that the subject drank was similar between those in the managed alcohol program and those in the control group (19.1 drinks/day and 21.9 drinks/day, respectively). Participants in the managed alcohol program consumed non-beverage alcohol on significantly fewer days per month than controls. The most commonly ingested non-beverage products were hairspray, hand sanitizer and mouthwash. Qualitative interviews revealed that managed alcohol program participants had a strong desire to avoid consuming non-beverage alcohol. They also revealed greater levels of perceived safety amongst participants compared to when they were not in the program. When participants were actively engaged in the managed alcohol program, they had 41% fewer total police interactions (and 33% fewer interactions that resulted in being taken into custody), 32% fewer admissions to hospital, and 87% fewer admissions to a detoxification service when compared to when they were not in the managed alcohol program. Results were also promising when comparing participants in the managed alcohol program to controls, with lower rates of interactions with police, interactions with police that resulted in being taken into custody, fewer detox admissions, and fewer presentations to the emergency room. Comparison of the managed alcohol program participants and controls also involved four categories of alcohol-related harm: 1) home life; 2) legal; 3)
		between the control and intervention groups were statistically insignificant. A total of seven intervention participants and four staff members were engaged in	part in recreational activities on-site or taking transportation provided by the centre to off-site recreation. The centre also provides transportation for	housing; and 4) seizure. The percentage of participants who experienced alcohol-related harm was lower across all categories for managed alcohol program participants compared to the control group, however these differences did not reach statistical significance. Laboratory reports for liver function tests were available for 13 of the participants in the managed alcohol program. When repeated tests were

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
		qualitative interviews, while 18 intervention participants and 20 controls underwent structured interviews.	off-site medical appointments.	available: seven of seven participants showed reduction in aspartate transaminase (or began and remained within reference range), nine of 10 showed reductions in alanine transaminase (or began and remained within reference range), and one of one reduced glutamyl transpeptidase. Authors found a very low rate of turn-over in the managed alcohol program. This was problematic given many people in the shelter adjacent to the Kwae Kii Win Centre were eligible for enrolment and waiting for a bed to become available. Those in the adjacent shelter had diminished access to services compared to those in the managed alcohol program. Namely, shelter residents must go outdoors (weather permitting) during the day, do not have access to on- or off-site recreational activities, do not have access to guaranteed transportation, and are not frequently visited by elders. When one of the 15 beds in the Kwae Kii Win managed alcohol program does become available, local police or staff from the next-door shelter will identify an eligible participant based on a combination of: 1) alcohol dependence; 2) frequent encounters with police; 3) chronic homelessness; and 4) a high risk of death or illness if admission to the managed alcohol program is not provided. Not all eligible candidates for the managed alcohol program do enroll when given the opportunity. Apprehensiveness regarding having to live within a more structured and rule-based framework, and stigma associated with being
Identify key dimensions	Publication date: 2018	Authors identified 13	Qualitative research	provided alcohol were identified as barriers to enrolment for some candidates. The study recognized six dimensions of community managed alcohol programs
of Canadian managed alcohol programs as well	Prontation date: 2016	separate, community- managed alcohol	Quantative research	that were consistent for all of the reviewed programs.
as implementation considerations (6)	Jurisdiction studied: Canada Methods used: Key informant interviews and document analysis	programs throughout Canada and collected data for each. In order to be included, the program had to have a focus on reducing harm, involve daily dispensing of alcohol and either provide alcohol or assist with alcohol management, and be in a community setting.		The first dimension was program goals and eligibility criteria. Managed alcohol programs operate within a harm-reduction framework and aim to eliminate or reduce the harms that come with consumption of alcohol in unsafe environments, consumption of non-beverage alcohol, and binge drinking. Typical eligibility criteria focused on a history of non-beverage alcohol consumption and binge drinking, long-term homelessness, frequent interactions with police or emergency-department services, repeated attempts (and failure) at abstinence, and recurrent behavioural issues (such as public intoxication). Physicians or nurse practitioners screened patients for eligibility for 12 of the 13 programs, sometimes relying on specific tools, namely the Alcohol Use Disorders Identification Test. One program was peer-organized and relied on participants to self-identify. Two programs were tailored for Indigenous people, and some only accept participants above a certain age (30 years in one case, 55 years in another). Eleven of the programs were open to all genders, however two were only available for use by transgendered men and men. The second dimension focused on the funding sources of managed alcohol programs, and money management for participants. Most of the programs

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				identified had multiple sources of funding, especially: 1) provincial or regional health systems; 2) special grants; and 3) provincial or regional housing funds. Authors noted challenges in securing long-term "core" funding and note that one program needed to shift from being palliative to being rehabilitative in order to be able to access additional funding sources. Eight of the 13 programs required participants to pay for services. These payments were deducted directly from government assistance payments and were usually calculated to cover the cost of a participant's housing or alcohol. Two of the identified programs involved staff working with participants to guide them in managing their funds, and one program took total responsibility for managing participants' funds (though aimed at "reducing the client's economic vulnerability" this raised concerns given its potential to infringe on an individual's autonomy and self-determination).
				The third dimension was alcohol administration and dispensing. Dosing frequency and amount varied, however alcohol dispensing roughly every hour up to a maximum or 11 or 12 doses per day was typical. Some programs dispensed alcohol at the start of the day and let clients set their own dosing schedule. Eight programs had specific policies to prevent intoxicated participants from receiving further alcohol. Wine was the most commonly dispensed beverage, and some offered wine diluted with water or juice. The dispensed alcohol was sometimes brewed on-site or in local wine stores that offered reduced costs.
				The fourth dimension involved food and accommodation. All managed alcohol programs provided food to participants, and sometimes involved them in food preparation. The type of housing associated with a managed alcohol program varied. Some transitional programs involved a set-up similar to a rooming house, while residential programs were located in permanent subsidized housing. Two of the 13 programs offered day services only.
				The fifth dimension was clinical monitoring and linkage to primary-care services. Managed alcohol programs generally aim to establish linkage to primary care, often with services on site or otherwise integrated directly into the program, given the unmet healthcare needs experienced by the population that utilizes managed alcohol programs. Additionally, clinical monitoring was emphasized in eight of the identified programs and took the form of liver function tests and continuing assessment or tracking of alcohol consumption.
				The sixth and final element was social and cultural connections. Through key informant interviews, the significance of introducing activities other than drinking to help develop healthy social interactions emerged as a recurrent theme. Cultural activities were particularly relevant for programs targeting

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
				Indigenous people, and included drumming, smudging, and prayer, among other activities.
Assess the impact of a shelter-based managed alcohol program (10)	Publication date: 2006 Jurisdiction studied: Canada Methods used: Structured interviews and records review	A total of 17 participants (15 men and two women) who were clients at Ottawa's shelter-based Managed Alcohol Program were enrolled in the study. All but one of the participants were white. In order to have entered the program, participants were referred by police or shelter staff and found to have severe alcohol dependence, as well as being homeless and a harm to the community or self. The mean duration of alcoholism was 35.2 years, and the mean age of participants was 50.7 years.	The managed alcohol program provided all participants with food and housing, as well as providing access to a staff member who was responsible for helping provide guidance on activities of daily living and assisting with ad hoc tasks such as applying for social benefits. Medical care was available 24/7 through a nurse or physician affiliated with the program. Each hour from 7 a.m. until 10 p.m., participants received either 90 ml of sherry or 140 ml of wine.	The number of drinks consumed per day by participants in the managed alcohol program was significantly lower compared to before entering the program: on average, drinks consumed per day dropped from 46 to eight after enrolment. The number of drinks per day prior to enrolment in the program was a rough estimate; many participants noted that they would drink all alcohol available to them until they lost consciousness. Reductions in alcohol consumption were accompanied by staff-reported improved hygiene and nutrition for all participants. A majority of participants also attended medical appointments as needed, and prescription compliance was high (88% of participants followed prescription instructions at least 80% of the time). The number of ambulance calls and diagnoses of intoxication, convulsions and trauma decreased for each participant when comparing before enrolment in the managed alcohol program to after, however these differences were not statistically significant. The mean number of police reports filed per month for the subjects decreased from 18.1 to 8.8. The mean number of emergency-department visits per month for the participants also dropped significantly, from 13.5 visits to eight. However, these findings did not apply to all participants; two demonstrated increased ED admissions while in the program compared to prior, and one participant had more police reports filed. Authors compared liver function tests from the two years prior to enrolment in the managed alcohol program to those obtained during participation, but did not find any significant individual or group-level differences. The authors conclude that Ottawa's shelter-based harm-reduction program can reduce alcohol intake as well as interactions with police and presentations to the emergency department, however the harm-reduction impact of the program was not assessed.

Focus of study	Study characteristics	Sample description	Key features of the	Key findings
Determining managed alcohol program participants' perceptions of quality of life and housing (12)	Publication date: 2016 Jurisdiction studied: Canada Methods used: Structured interview and quantitative surveys	Intervention participants were recruited from the Kwae Kii Win Centre's 15-bed managed alcohol program, for both men and women, in Thunder Bay, ON. All intervention participants enrolled in the study self-identified as being Indigenous. Controls were recruited from an emergency homeless shelter. To be enrolled as a control, a participant had to meet the criteria to be eligible for intake by the managed alcohol program treatment at the Kwae Kii Win Centre, but not currently enrolled in the program. Of the 18 intervention participants, mean age was 42 years, 11 were male, and seven were female. Of the 20 controls, mean age was 37 years, 12 were male, and eight were female.	intervention(s) The managed alcohol program at the Kwae Kii Win Centre targets those who frequently consume non-beverage alcohol and have long histories of homelessness. Participants are provided housing, food and groceries, financial counselling, linkage to onsite primary care and counselling, and "life skills training." Participants receive one 20.46 ml drink (12% EtOH by volume) every 90 minutes from 8 a.m. until 11 p.m. Participants must be present at the Centre for at least 60 minutes before a drink is provided, and a drink will not be provided to those who appear visibly intoxicated. Participants in the program have the option of taking part in recreational activities on-site or taking transportation provided by the centre to off-site recreation. The centre also provides transportation for off-site medical appointments. An Indigenous elder visit the Kwae Kii Win Centre regularly engages with participants, and an Indigenous drumming program is offered.	Assessment of housing quality and satisfaction was divided into seven measures: 1) length of stay; 2) affordability; 3) safety; 4) spaciousness; 5) privacy; 6) friendliness; and 7) overall quality. On aggregate, participants in the managed alcohol program provided higher ratings for satisfaction with length of stay, safety, spaciousness, privacy, and overall quality; however, no significant difference was found between controls and managed alcohol program participants in satisfaction with affordability and friendliness. A combined assessment of self-reported perception of physical health, psychological well-being, social relationships, and quality of participants' environment was undertaken using the WHO quality of life-BREF tool. Average ratings for all domains of the assessment were higher (more favourable) for participants in the managed alcohol program compared to the control group, though this difference was only statistically significant for the environment domain. Authors define the environment domain as "an assessment of home life, safety, satisfaction with physical environment, finances, transportation, and access to health services and information." Structured interviews with participants in the managed alcohol program revealed common themes. Participants described the program as affording them greater safety and an improved quality of life when compared with what they considered to be their alternative options: being in hospitals, shelters, or jails, or living "on the streets." One participant noted a sense of trust among the program members which developed his personal confidence. Another participant stated that safety was her primary concern given the streets and emergency shelters constitute high-risk environments, particularly in the context of her identity as an Aboriginal woman. Authors conclude that the examined managed alcohol program fostered "a sense of community that countered stigma, loss, and dislocation with a potential for health and recovery." Further, these traits were conducive t

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
Identify enabling factors in managed alcohol programs that facilitate changes in alcohol consumption (45)	Publication date: 2015 Jurisdiction studied: Canada Methods used: Case study with comprehensive interviews/focus group and qualitative analysis	Interviews were conducted with 10 males who were enrolled in a managed alcohol program in Toronto, followed by a subsequent focus group with all 10 participants. The mean age of participants was 51.7 years.	Qualitative research	Participants who were interviewed provided generally positive feedback on the impact that managed alcohol programs had on their well-being. One client noted that before entering the managed alcohol program, he had been referred to hospice by his physician, but his enrolment in the managed alcohol program afforded motivation for him to continue living. Authors note that "This description of despair followed by re-enchantment with life was representative of how respondents narrated their experiences in the program." Three themes emerged from the interviews: togetherness, awareness and self-management. When asked about their transition from homelessness to the managed alcohol program, some clients expressed that they were met with initial difficulties trying to "fit in" with other clients. However, most did eventually "fit in" and developed meaningful interpersonal relationships with an accompanying perception of "togetherness." This led clients to describe the managed alcohol program and other participants as their home and family. Facilitators for a "sense of togetherness" were identified as similar life experiences among participants that enabled group identification, past familiarity between some participants who had encountered one another before enrolment in the managed alcohol program, and the physical proximity of clients who tended to spend a significant portion of each day on-site interacting with other participants in common activities. Participants harboured favourable views of the support workers associated with the managed alcohol program, who aided clients who were engaging in behaviour that could lead to their removal from the program. The support workers were viewed as playing an active role in creating a "sense of togetherness" by helping participants maintain their continued enrolment. Participants revealed that their enrolment in the managed alcohol program had prompted greater self-awareness, namely "contemplation of one's physical condition and morality." This greater self-awareness enabl

Determining the Features of Managed Alcohol Programs

Focus of study	Study characteristics	Sample description	Key features of the	Key findings
			intervention(s)	
				resulted from drinking a managed amount of alcohol through hourly dosing.
				Participants described that regular consumption of smaller amounts of alcohol
				(including low-alcohol beer in some cases) throughout the day reduced their
				inclination to binge drink. It is for this reason that many participants expressed
				fear that their self-management would end upon leaving the program, since they
				may return to irregular and binge-driven alcohol consumption (ultimately
				resulting in their return to homelessness). Of the 10 interviewed participants,
				eight chose to abstain from alcohol consumption for some duration while in the
				managed alcohol program. These participants connected their choice to abstain
				from alcohol with a notion of personal responsibility.





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