Assessment of a Managed Alcohol Program: A Harm Reduction Strategy – Preliminary Results

Gabrielle Huneault[1], Graydon Simmons[1,2], Aleena Abbasi[3], Andrew Neitzel[3], Daniel Myran[3], Daniel Kobewka[1,2,3], Clara Lu[1,2], Tim Ramsay[3], Rakesh Patel[1,2], Aliza Moledina[1,2,3]

1 The Ottawa Hospital, Department of Medicine, University of Ottawa, Ottawa, Canada
2 The Ottawa Hospital, Department of Medicine, Division of General Internal Medicine, Ottawa, Canada
3 The Ottawa Hospital Research Institute, Ottawa, Canada

Evidence of Conflict of Financial Interest:

	Co-author	Conflict Disclosures
1	Gabrielle Huneault	No conflicts to disclose
2	Graydon Simmons	1) GSK – Site Co-investigator on site Hepatitis B antiviral trials 2) CIHR – Co-investigator on CIHR funded grant
3	Aleena Abbasi	No conflicts to disclose
4	Andrew Neitzel	No conflicts to disclose
5	Daniel Myran	No conflicts to disclose
6	Daniel Kobewka	No conflicts to disclose
7	Clara Lu	No conflicts to disclose
8	Tim Ramsay	No conflicts to disclose
9	Rakesh Patel	No conflicts to disclose
10	Aliza Moledina	No conflicts to disclose

Background

- Alcohol Use is a leading cause of morbidity and mortality globally[1,2]
- Individuals with both Alcohol Use Disorder and homelessness are particularly vulnerable to poor health outcomes, complicated by high rates of medical co-morbidity and complex social circumstances[3-5]
- Managed Alcohol Programs (MAPs) are an innovative harm reduction strategy designed to serve individuals suffering from severe alcohol use disorder and chronic homelessness[6-8]
- Despite growing recognition of MAPs' potential to stabilize alcohol use and provide comprehensive social and medical support[8-10], there is limited evidence on the long-term clinical outcomes of MAP participants and the characteristics that predict sustained engagement

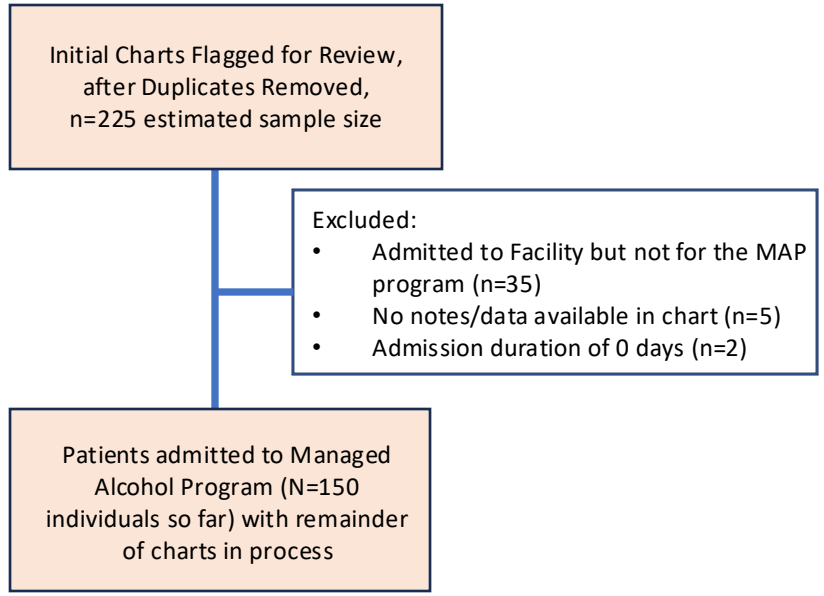
Objectives

Our aim was to describe the baseline socio-demographic and clinical characteristics of patients at their first entry into the residential MAP and provide the discharge rates and disposition data of MAP participants.

Lastly, we will identify the factors associated with early program discontinuation and will examine the long-term clinical trajectory of MAP participants, specifically, development of cirrhosis, transfer to long-term care and mortality.

Methods

- Retrospective study using electronic medical records from a local managed alcohol program
- Include participants who were enrolled in the managed alcohol program between January 1 2010 and December 31 2024, with an estimated sample size of approximately 225 individuals
- Data collected: Socio-demographic characteristics, medical comorbidities including cirrhosis upon entry, bloodwork with a focus on liver enzymes and LFTs, days in program, reason for discharge/transfer, death



Results

Table 1. Socio-demographic and clinical characteristics of all MAP participants

	All Participants (Entry 2010-2024), N (%)
Socio-demographic Variables	
Age (mean, in years)	54.4
Gender (proportion male)	124 (83)
Smoking (proportion reporting daily smoking)	111 (74)
Clinical characteristics	
AST on entry (mean)	74.4
ALT on entry (mean)	48.2
Bilirubin on entry (mean)	12.7
INR on entry (mean)	1.4
Albumin on entry (mean)	39.9
Cirrhosis at first entry	10 (6.7)
CAD	16 (10.7)
CHF	10 (6.7)
Diabetes	20 (13.3)
Hypertension	40 (26.7)
Stroke	11 (7.3)
Cancer	9 (6.0)
Cognition	46 (30.7)
Mood disorders (including mania)	99 (66.0)
Psychosis	34 (22.7)
Medications (mean number)	5.5

Table 2. Discharge and Disposition Rates of MAP participants, from those enrolled in the program between January 1 2010 and December 31 2024

	All Participants (Entry 2010-2024), N (%)
Total number of MAP participants	150
Participants still admitted to MAP	35 (23.2)
Deceased[a]	57 (37.7)
Discharged[b,c] (non-death, non-LTC, non-hospice, non-hospital)	44 (29.8)
Transfer to LTC	5 (3.3)
Transfer to Hospice (with no return to MAP afterwards)	4 (2.6)
Transfer to Hospital (with no return to MAP afterwards)	5 (3.3)
Time to death from entry into MAP (median, days)	1164
Time to transfer to LTC from entry into MAP (median, days)	1640
Time to transfer to Hospice from entry into MAP (median, days)	240.5
Duration of MAP stay[d] (median, days)	763

a: Deceased refers to participants where death was noted to be the reason for discharge, or alternatively, when a patient was discharged to hospital and ultimately died, or when a patient was transferred to hospice and ultimately died
b: Reasons for Discharge include: the program not working out, transfer to alternative housing, pursed independent housing/living with family, transfer to transient diversion program with no documented return, other (alternate care settings, no information available)
c: Of the 44 patients who were discharged, 43% left within 6 months of first entry to the program
d: Excluding patients who remain admitted in the MAP

Conclusion

- Highly comorbid residents, large proportion of the residents affected by mood disorders, hypertension, and cognitive concerns, highlighting the medical complexity of this population. Notably, numbers may be underestimated at first entry given lack of access to care
- High degree of retention in the program, with only ~ 30% of the patients being discharged voluntarily (not related to transfer to hospital, hospice, long-term care or death). Once data collection is complete, we will aim to determine characteristics associated with sustained program involvement
- High proportion of mortality captured. We will aim to further describe mortality trends over time.

Next Steps

- This study will provide one of the most comprehensive longitudinal descriptions of residential MAP participants at a single site to date
- Plan to conduct time to event analyses to examine the development of cirrhosis, transfer to long term care, and mortality following MAP enrollment
- Findings may inform clinical and policy decisions regarding eligibility criteria, resource allocation and the integration of MAPs within broader harm reduction and supportive housing systems
- By identifying the characteristics associated with successful MAP engagement and long-term outcomes, this work will help optimize care for a highly marginalized and medically complex population

References

1. Medical Complications: Common Alcohol-Related Concerns | National Institute on Alcohol Abuse and Alcoholism (NIAAA). Accessed on September 18 2025. https://www.niaaa.nih.gov/health-professionals-communities/core-resource-on-alcohol/medical-complications-common-alcohol-related-concerns

2. Kendler KS, Ohlsson H, Sundquist J, Sundquist K. Alcohol Use Disorder and Mortality Across the Lifespan: A Longitudinal Cohort and Co-relative Analysis. *JAMA Psychiatry.* 2016 Jun 1;73(6):575-81. doi: 10.1001/jamapsychiatry.2016.0360

3. Fichter MM, Quadflieg N. Course of alcoholism in homeless men in Munich, Germany: results from a prospective longitudinal study based on a representative sample. Subst Use Misuse. 2003 Feb-May;38(3-6):395-427. doi: 10.1081/ja-120017379.

4. Burak A, Cierzniakowska K, Popow A. Homeless people under the influence of alcohol admitted to hospital emergency departments in Poland. Nordisk Alkohol Nark. 2020 Apr;37(2):190-200. doi: 10.1177/1455072520908387. Epub 2020 May 1. PMID: 32934601; PMCID: PMC7434175.

5. Baggett TP, Chang Y, Singer DE, Porneala BC, Gaeta JM, O'Connell JJ, Rigotti NA. Tobacco-, alcohol-, and drug-attributable deaths and their contribution to mortality disparities in a cohort of homeless adults in Boston. Am J Public Health. 2015 Jun;105(6):1189-97. doi: 10.2105/AJPH.2014.302248. Epub 2014 Dec 18. PMID: 25521869; PMCID: PMC4431083.

6. Pauly BB, Vallance K, Wettlaufer A, Chow C, Brown R, Evans J, Gray E, Krysowaty B, Ivsins A, Schiff R, Stockwell T. Community managed alcohol programs in Canada: Overview of key dimensions and implementation. Drug Alcohol Rev. 2018 Apr;37 Suppl 1:S132-S139. doi: 10.1111/dar.12681.

7. Podymow T, Turnbull J, Coyle D, Yetisir E, Wells G. Shelter-based managed alcohol administration to chronically homeless people addicted to alcohol. CMAJ. 2006 Jan 3;174(1):45-9. doi: 10.1503/cmaj.1041350. PMID: 16389236; PMCID: PMC1319345.

8. Matthison C, Belesiotis P, Wilson M. Determining the Features of Managed Alcohol Programs. Published online February 2019:32.

9. Vallance K, Stockwell T, Pauly B, Chow C, Gray E, Krysowaty B, Perkin K, Zhao J. Do managed alcohol programs change patterns of alcohol consumption and reduce related harm? A pilot study. Harm Reduct J. 2016 May 9;13(1):13. doi: 10.1186/s12954-016-0103-4. PMID: 27156792; PMCID: PMC4860767.

10. Smith-Bernardin SM, Suen LW, Barr-Walker J, Cuervo IA, Handley MA. Scoping review of managed alcohol programs. Harm Reduct J. 2022 Jul 25;19(1):82. doi: 10.1186/s12954-022-00646-0.