TOWARDS ALCOHOL HARM REDUCTION: PRELIMINARY RESULTS FROM AN EVALUATION OF A CANADIAN MANAGED ALCOHOL PROGRAM

A report prepared for Kwae Kii Win Centre Alcohol Management Program by the Centre for Addictions Research of BC, University of Victoria, BC, Canada

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Table of Contents

Executive Summary

Introduction

This report presents an evaluation of a Managed Alcohol Program (MAP) currently being provided for homeless men and women in the Thunder Bay, Ontario region who have severe problems relating to alcohol use and homelessness. The aims of the research were to establish whether the MAP was contributing to (i) improvements in health and well-being of participants (ii) reductions in their use of emergency, hospital and police services, and (iii) less hazardous patterns of alcohol including reduced use of non-beverage alcohol. We also aimed to inform the development of future program and policy recommendations. This was a pilot study for a national research program funded by the Canadian Institutes for Health Research for the evaluation of five MAPs in Ontario and British Columbia.

Harms from alcohol can be broadly classified as acute, chronic, and social (Rehm et al., 2009; Stockwell et al., 2010). Prolonged, heavy alcohol use increases the risk of numerous physical diseases while episodes of intoxication increase risk of self-inflicted and accidental injuries. In this population such problems are especially prevalent and, as well, may be compounded by the use of non-beverage sources alcohol such as rubbing alcohol, mouthwash, hair spray or alcohol-based hand sanitizers.

Previous research has demonstrated health and social benefits for this population and also reduced alcohol consumption when continued use of alcohol is tolerated in a housing program (e.g. Marlatt and Witkeiwitz, 2010). In Canada, to our knowledge 6 MAPs have taken this a step further by providing beverage alcohol of known quality to program participants at regular intervals over the day

Shelter House opened a MAP (the Kwae Kii Win Centre) in Thunder Bay, Ontario, in March 2012. It provides 15 beds for men and women with severe alcohol dependence who have been living outside or in emergency shelters and have a high rate of police contact. It provides communal living where residents receive meals, assistance with money management, health care services, counseling and referrals to health, housing and cultural supports appropriate to their needs.

Methods

A small-scale mixed methods study was designed to collect in depth information and perceptions from staff and MAP participants over six months as well as data on police contacts and healthcare episodes over a five-year period including both times on and off the MAP. A comparison group who met the MAP eligibility requirements was drawn from the emergency homeless shelter run by the same organization. The same assessments were conducted with the control participants over the same time period. Structured surveys were conducted with 18 MAP and 20 control group participants about their housing, physical health, mental health and well-being, alcohol related harms, harms of alcohol use, non-beverage alcohol use and alcohol consumption at baseline. Of the 18 MAP participants, 7 were female and among the 20 control participants 8 were female. All 38 research participants reported being Aboriginal. Mean age of MAP participants was 42 years (range 25-61) and 37 years (range 21-50) for controls. All resident participants were assessed using the AUDIT as severely alcohol dependent. Liver

function tests, alcohol administration records, hospital and police records were accessed to determine changes in physical health, alcohol consumption, police and health services contacts. A smaller sub-sample of both MAP and control participants was followed monthly. Five MAP participants and six control participants repeated the baseline survey at six months. We also conducted in-depth qualitative interviews with 7 MAP residents who had on average one year of experience in the program and 4 staff.

Results

All the MAP participants expressed that participation in the MAP program was beneficial to them and had positive impacts on their lives. In particular, they highlighted that the program gave them access to housing, home, health and hope. A summary of the qualitative and quantitative findings are outlined below for each dimension of the program evaluated.

Housing: Overall, participants in the qualitative interviews clearly expressed that housing was a highly valued aspect of the program. The availability of housing and presence of program staff increased feelings of safety and contributed to the harm reduction goals of the programs including reducing the harms of street life. The majority of MAP participants (14/17) retained their housing in the program during the study period, whereas controls remained homeless. Participants' ratings of their satisfaction with their housing were significantly higher than controls on length of stay, safety, spaciousness, privacy, and overall quality. MAP participants did express some concerns around the requirement to be in the building 90 minutes before alcohol administration and the occasional room searches for alcohol but they also appreciated that these were a necessary part of the program and highly valued the safety and security of the program compared to the dangers of the street. Thus, the MAP facilitates housing retention and increased safety for MAP participants.

Mental Health and Well-Being: In qualitative interviews, residents and staff reported an improved quality of life for MAP participants, as evidenced by improvements in mental and physical health including enhancing feelings of self-esteem and self-worth, reconnection with family, and improved life skills. Improved skills included learning communication skills, self-care, relationship skills, and money management skills. Participants in the MAP rated their psychological wellbeing, the quality of the environment they lived in and their social relationships higher on a standard scale (WHO-BREF) than controls.

Physical Health: MAP participants commented on how they had better access to food and were eating much better in the program. Their ratings of physical health at baseline on the WHO BREF scale for both participants and controls indicated compromised health and functioning. In the sub sample followed up over 6 months, these ratings indicated further declines in health for both participants and controls. Out of the 13 MAP participants for whom complete liver function tests were available at some point during the study, 10 had results that indicated alcoholic liver damage. However, examination of individual test results for program participants over time showed that in the great majority of cases test results for liver function were improving.

Reduction in Alcohol Related Harms: Fewer MAP participants than controls reported harms due to alcohol in the past month in the domains of home life, legal, housing, and withdrawal seizures. Because most MAP participants had been resident in the MAP several months before this interview this is suggestive of long-term program benefits. During the monthly follow-up assessments, only rates of passing out and seizures were assessed.

Access to Health Care Services: Both residents and staff reported that MAP participants gained increased access to health care services as part of being in the program. This was facilitated by no longer being in survival mode, as well as by a nurse practitioner at the program site and support in getting to and keeping medical appointments. Participants reported being able to attend to previously unaddressed health issues.

Changes in Contact and Police and Health Services: Qualitative interview responses indicated MAP participants felt they had better relationships with the police than when they lived on the street. Our analysis of health and police data indicated substantial reductions for MAP participants in rates of police contacts, hospital admissions and detoxification admissions mostly in the region of between 40% and 80%, both in comparison with rates when the same participants were not on the MAP and in comparison with controls. Despite individual variability and relatively small sample sizes, these comparisons were statistically significant for both hospital and detoxification admissions. There was also a significant reduction in police contacts resulting in being taken into custody when they were on the MAP. MAP participants also presented less often at hospital emergency rooms compared with controls but this difference was not statistically significant.

Non-Beverage Alcohol Use: The three most common types of non-beverage alcohol (NBA) consumed by both participants and controls were mouthwash, hand sanitizer and hairspray. All participants and 16/19 controls reported some NBA use in the previous month though MAP participants reported significantly smaller quantities than the controls. This change in NBA use by MAP participants was confirmed variously by the qualitative interviews with staff and residents and also quantitative survey data collected at baseline and follow-up interviews. Consumption of NBA did continue for some participants, but at a lower level. In the qualitative responses the participants made a strong distinction between the wine provided on the program and the "garbage" and "bad stuff" they had consumed outside.

Overall Alcohol Consumption: Participants consumed on average 9 to 11 standard drinks per day, based on the records kept by MAP staff regarding drinks administered on the program and participants' self-reports of drinks consumed outside the program. This was a stable pattern during the 7-month course of the study. However, among the smaller subsamples of participants (n=5) and controls (n=6) followed up for 6 months, drinking frequency in the past 30 days was markedly higher for MAP participants (28 days) than for controls (16 days), representing a slight increase for participants and a marked reduction for the controls. This would of course reflect compliance with the MAP for participants on the one hand and the less secure supply of alcohol and/or higher rate of incarceration among controls.

Conclusions

The objectives of the program to reduce harm and improve quality of life for MAP program participants were being met as evidenced by the overall pattern of improvement in formal indicators related to housing, mental and physical well-being, reductions in alcohol related harms, decreasing NBA use and more stable patterns of alcohol consumption. Further, the observed substantial reductions in hospital admissions and times in police custody indicate substantial economic savings for the local community. An overarching achievement of the program is the creation of a safe and stable environment reported by participants in both qualitative and quantitative data. This is striking and stands in sharp contrast to the harms this population is exposed to on the street. The safety and stability provided by the program also enabled many participants to reconnect with family members and have greater feelings of self-worth and well-being. It appears that as residents stabilize in MAP, they are ready and more able to access to health, social and cultural resources that foster healing and recovery suggesting potential areas for program enhancements.

1.0 Introduction

Approximately 76.3 million people suffer from alcohol use disorders globally, and in Canada alcohol dependence is estimated to affect around 2.6% of the general population (WHO, 2004; Tjepkema, 2004). Both the main international diagnostic classification systems in current use (DSM-IV and ICD-10) define alcohol dependence in terms of a clustering of signs and symptoms of increased tolerance, the experience of withdrawal, continued use despite the experiencing problems, and a degree of impaired control over consumption (Hasin et al, 2006). Severe alcohol dependence almost invariably carries heavy health and social costs and is sometimes associated with homelessness or housing instability (Muckle, Oyewumi, Robinson, Tugwell, ter Kuile, 2008; Cordray, 1993; WHO, 2007). In Canada, Aboriginal peoples are over-represented both among the homeless and among people experiencing harmful consequences related to alcohol and other substance use (Hwang, 2001; Reading, 2009). Among homeless male populations, the prevalence of alcohol dependence has been estimated to be 37.9%. There is little or no information available related to severe alcohol dependence among homeless women (Fazel et al, 2008). In general, those who are severely dependent on alcohol and experiencing homelessness face significant barriers to accessing temporary accommodation and in some cases will go without shelter as a consequence of alcohol use (Williams, 2011).

Severe alcohol dependence has many acute and long term health consequences including increased risk of numerous physical diseases (Witkiewitz and Marlatt, 2006). Heavy drinking increases risk of self-inflicted and accidental injuries (Witkiewitz and Marlatt, 2006). In some cases, non-beverage alcohol such as rubbing alcohol, mouthwash, or alcohol-based hand sanitizers may be used. These are relatively low-cost, readily available and may contribute to a variety of additional health risks (Podymow et al, 2006). There are few programs for people experiencing both severe alcohol dependence and housing instability (Collins, Clifasefi, Dana, Andrasik, Stahl, Kirouac and Malone 2012a; Clifasefi, Logan, Samples, Somers and Marlatt, 2012b; Collins, Malone, Clifasefi, Ginzler, Garner, Burlingham and Larimer, 2012c; Collins et al, in press, Podymow et al. 2006; Larimer et al, 2009; Thornquist, 2002; Svoboda, 2006). Housing First programs for this population that incorporate a harm reduction philosophy and practices that seek to reduce the harms of substance use without necessarily eliminating or reducing use (Collins et al., 2012b; Marlatt, 1996; Marlatt and Witkeiwitz, 2010; Riley and O'Hare, 2000). Some programs seek to reduce harms for a particular population, primarily by providing stable housing, which can have intrinsic health and social benefits, and also through tolerating continued use of alcohol. Managed alcohol programs (MAPs) take this approach a step further by providing beverage alcohol of known quality to program participants at regular intervals to replace non-beverage alcohol which may be more hazardous.

Harms from alcohol can be broadly classified as (i) "acute" comprising injuries, poisonings, or acute illnesses partly caused by an episode of heavy use; (ii) "chronic" comprising a range of serious illnesses including liver disease, cancers, strokes, and gastrointestinal diseases which are caused by the overall volume of alcohol consumed over time (Rehm et al., 2009) and (iii) "social" which can result from both heavy drinking episodes as well as sustained regular drinking and comprise problems experienced in the

spheres of housing, finances, relationships, the law, and workplace (Stockwell et al., 2010). The risk of these kinds of harms to the individual drinker is influenced by a range of contextual and other lifestyle factors but, when these are held constant, there is a dose response risk for both acute and chronic alcohol related harms (Rehm et al., 2007; Stockwell et al., 2012). For example, daily consumption in excess of 6 standard Canadian drinks is associated with a more than threefold increase in risk of premature death from cancer of the oesophagus, hypertension, or from liver cirrhosis (Stockwell et al., 2012) and increased risks from approximately 60 other causes of death (Rehm et al., 2009).

There is evidence that ingredients added to non-beverage alcohols pose risks to health over and above ethanol content (Rehm et al., 2011). Methanol is known to be particularly hazardous while isopropanol which is an ingredient found in rubbing alcohol and hand sanitizer also poses risks but to a lesser degree (Adla et al., 2009; Zaman et al., 2002). Dental mouthwashes such as Listerine (which contains 26.9% alcohol/volume) are not thought to pose serious risks unless consumed at very high doses (Rehm et al., personal communication, 2012).

While there is robust evidence for illicit drug harm reduction strategies, there has been relatively little attention paid to reducing the harms of severe alcohol dependence among people with unstable housing (Marlatt and Witkiewitz, 2010). Thornquist et al., (2002) compared three programs that tolerated alcohol use in this population (two housing programs and one street based case management program) and found that these programs resulted in decreased use of hospital and detox services by people who were previously high users of Emergency Departments (EDs). In each of the programs, there was no expectation that participants would reduce or eliminate alcohol use and neither housing program required sobriety. Initial research on Housing First interventions for people with severe alcohol dependence affirms that the provision of non-abstinence based housing can reduce the harms of alcohol use (Collins et al., 2012a; Collins et al., 2012c; Collins, Malone and Larimer, 2012d; Larimer et al., 2009). In one study of a Housing First intervention in Seattle, Larimer et al. reported a significant decrease in costs associated with health and social services such as emergency medical care and law enforcement interactions (Larimer, Malone, Garner, Atkins, Burlingham et al., 2009). Although decreased alcohol use was not a primary goal of this Housing First program, they found decreases in alcohol consumption and alcohol related harms over the first two years of the programs (Collins, Malone, Clifasefi et al 2012c), contrary to fears that the provision of housing to this population might escalate drinking and related harms. In exploring the role of alcohol use in the lives of the participants, Collins et al. (2012a) mention voluntary 'managed alcohol programs' as part of an individual participant's alcohol management plan in which staff store and redistribute residents' alcohol. However, they give no specific explanation, description, or evaluation of the 'managed alcohol' aspect of this housing program. A recent small in-depth study of homeless people with alcohol dependence confirmed that alcohol use was a significant barrier to accessing shelters and maintaining stable accommodation. Most participants in that study also indicated they would be willing to participate in a MAP were it available (Stockwell et al., 2012).

In Canada, MAPs have evolved as an intervention that provides participants with accommodation and alcohol up to a certain number of doses each day to be consumed on-site. To date, we are aware of other formally established MAPs in Canada located in Ottawa (2), Toronto, Thunder Bay, Vancouver (2),

and Hamilton. The Ottawa, Toronto, and Thunder Bay programs were initiated in emergency shelters and continue to provide shelter based managed alcohol programs. Ottawa has added a second program in a renovated hotel which provides housing for long term MAP participants. Hamilton has both shelter and housing based managed alcohol programs. The Vancouver program was initiated in a new supportive housing complex. A second Vancouver program was established for three residents in another supportive housing unit in the downtown area. This latter is a lower threshold program for participants with high numbers of emergency room presentations and a range of health issues. Recently, we have learned of two informal programs set up for one or two individuals in smaller towns in the interior of British Columbia.

The oldest program, Toronto's Seaton House, was initiated following an inquiry into the tragic freezing deaths of three men on the streets of Toronto during the winter months in the mid-1990s (Svoboda, 2006; 2009). The inquiry's recommendation was to develop a 24-hour shelter program that included in-shelter provision of alcohol. In an evaluation of administrative data from that program, participants were found to have increased numbers of shelter days, decreased prison days, decreased ED visits, and decreased detox days (Svoboda, 2006). Similarly in Ottawa, an evaluation of 17 adults involved in the Ottawa MAP showed improved health outcomes, fewer ED visits, fewer police contacts, and reduced alcohol consumption over an average of 16 months in the MAP (Podymow et al., 2006). It is noteworthy, however, that Podymow et al. did not attempt to record participants' alcohol consumption outside of the MAP and it is therefore not clear whether overall consumption was in fact reduced.

Recently, the present research group completed an evaluation of a small MAP in Vancouver, British Columbia (Stockwell et al, 2013a and 2013b). Self-ratings by participants, clinical ratings made by a physician and qualitative analysis of interviews with the program staff showed that some of the program's key objectives had been met during the first 9 months of its operation, namely that participants (i) maintained their housing and expressed high satisfaction with it; (ii) reported greater wellbeing and positive changes in their lives (iii) had improved access to services; (iv) mental health measures improved; (v) drank less non-beverage alcohol; and (vi) mostly hade fewer alcohol-related harms, especially relating to relationships, finances and withdrawal seizures. There were also some challenges identified including evidence of poorer physical health such as deterioration in liver functioning and increased alcohol consumption for some residents. The lack of a control group as well as any control for seasonal factors make it hard to determine if the same trends would have happened were the participants not on the MAP. It was suggested that there may, alongside the benefits of MAPs, be unintended negative effects associated with a non-stop drinking pattern over several months. Because of evidence that "liver holidays" reduce the likelihood of alcohol-related liver disease (Kamper-Jorgensen et al, 2004; Parrish and Dufour, 1991), it is possible that the pattern of non-stop drinking on a MAP could be more harmful to the liver than the intermittent and more chaotic pattern of street drinking which is interrupted when money runs out and when drinkers are incarcerated or hospitalized. It was recommended that in future, steps be taken to 1) ensure of dependence; 2) that administration of alcohol be tailored individually to ensure no increase in consumption occurs; and 3) that periods of short or longer "liver holidays" are programmed if necessary with medication provided to manage

withdrawal symptoms. Similar to Podymow (2006), participant and staff reported other notable benefits of participation in MAP including increased compliance with medical care, better hygiene, and improved overall health (Podymow et al., 2006).

To the extent that a MAP replaces the sporadic pattern of heavy drinking episodes and intoxication with a steady continuous daily pattern, it can be expected that risk of acute and social harms will be reduced. To the extent that access to a steady and reliable source of alcohol reduces overall volume of consumption over time, a MAP might also reduce risk of chronic alcohol related harms. There is evidence that having regular periods of abstinence when the liver is not metabolizing alcohol is protective against the development of liver disease and liver specialists frequently recommend all drinkers should have at least one or two abstinent days per week (e.g. Royal College of Physicians, 2010; O'Shea et al., 2010). Canada's low-risk drinking guidelines include a similar recommendation (Butt et al., 2011). Because of these considerations, in the present study evaluating the Kwae Kii Win MAP, we attempted to assess health and well-being comprehensively across all the above domains (acute, chronic and social) as well as both beverage type and patterns of alcohol consumption.

In this report, we present results from a recently conducted evaluation at one Canadian MAP in Thunder Bay with the aim of informing the development of this program and planning of further MAPs in Canada. While the objective of the MAP was to reduce harms of alcohol use and improve overall quality-of-life for the participants rather than reduce overall alcohol consumption, the evaluation also seeks to assess changes in risks of harm posed by any change in patterns of drinking by participants. Unlike heroin prescription (Rehm et al, 2001), alcohol administration in relatively high doses poses a wide range of serious risks to health as a function of both level and pattern of consumption of ethanol (Rehm et al., 2009; Rehm et al., 2011). The health risks, as outlined earlier, include short-term consequences from a heavy drinking session such as injury and acute illnesses and long-term consequences such as liver disease and various cancers.

In the present study, we included objective and self-reported measures of quality of housing, physical health, mental health, quality of life, access to health care, harms of alcohol use, severity of dependence and alcohol consumption in relation to overall volume, pattern, and related harms with comparisons at baseline, monthly follow-up and 6 months post intervention for as many consenting MAP participants and control participants as possible. We approached the measurement of alcohol consumption patterns from the vantage point of examining whether alcohol-related harms were reduced by virtue of variously (i) enabling participants to shift their consumption away from more dangerous non-beverage sources of alcohol, (ii) smoothing their overall pattern of drinking away from episodic intoxication and its associated acute adverse consequences, and (iii) not increasing the overall volume of consumption over time. The possibility of the MAP leading to a reduction in alcohol consumption (and hence a further reduction in risk of harm) could also be assessed with the measures employed. We also assessed police and health care records to determine changes in number of police and health care contacts. Identical sets of surveys were conducted with the control participants at the same time intervals to obtain more detailed individual level data on key measures and evidence of any differential changes in these while MAP participants were on the program. To gain insight into the process of the program, we conducted

in-depth open-ended qualitative interviews regarding participant and staff experiences in MAP, including benefits and challenges and provide recommendations for improvements to the program.

2.0 Research Objectives

Objective 1: To establish whether entry into the MAP contributes to significant improvements in the health and well-being of participants as indicated by measures of general physical health, longevity, mental health, perceived housing quality, access to health care, quality of life, indicators of alcohol and other drug-related harm.

Objective 2: To establish whether entry into the MAP contributes to significant reductions in the usage of emergency, hospital and police services.

Objective 3: To investigate whether entry into the MAP contributes significantly to less hazardous patterns of alcohol use as indicated by reduced use of non-beverage alcohol, fewer episodes of severe intoxication and less use of high risk drinking settings while not resulting in increased consumption.

Objective 4: To inform the development of program and policy recommendations for MAPs by identifying participant and program characteristics that are most likely to predict positive outcomes and critically examine practical, ethical and legal issues as part of the implementation of MAPs.

3.0 Program Description and Evaluation Methods

Shelter House opened a MAP, the Kwae Kii Win Centre, in Thunder Bay, Ontario, in March, 2012. The mission of Shelter House is "to provide basic needs, dignity and comfort to people living in poverty and stimulate action to address the root causes of homelessness." The Kwae Kii Win Centre is a 15 bed program serving men and women with severe alcohol dependence who have been living outside or in emergency shelters. The program was established in response to the needs of people with severe and chronic alcohol use problems, many of whom have long histories of homelessness, public intoxication, and regularly consume non-palatable alcohol. The program was created in an effort to reduce the harm of alcohol use for program participants and to alleviate the load on community services such as police and emergency responders. The program was created in response to significant concerns related to public intoxication in the community, and facilitated by the work of the Thunder Bay Drug Strategy and the Thunder Bay Police Service to address public intoxication in manner that reduced reliance on enforcement.

Residents of the Kwae Kii Win Centre receive meals, help managing money, access to primary health care, life skills training and counselling. Most significantly, clients receive one alcoholic drink every 90 minutes from 8am to 11pm as a way to manage their drinking. The program generally uses white wine, and each drink served is 6oz. Individuals must be assessed as not being overly intoxicated in order to receive their dose and being present at the facility for the 90 minutes prior to receiving their next dose. The 90 minute rule has been relaxed to 60 minutes prior to receiving their next dose. Drinking outside

the program is discouraged and clients are refused alcohol if they are not present for the specified period prior to their dose. Staff track alcohol administration on paper chart.

The program is funded in part by contributions from the MAP residents through their social assistance amounts, and through federal and provincial project grants. Meals are provided for individuals in the MAP by the shelter next door or clients cook their own meals. Other types of programming are available to individuals including money management, primary health care, drumming, life skills and counseling. The program is staffed 24 hours per day, with at least two people on at any given time. A community worker comes in to help people connect to legal services and work on getting ID, income support or other social support applications. Staff members are available to provide support to clients and oversee the administration of alcohol. The program also provides access to primary care and community supports to assist each client in improving his or her wellness and health overall. A nurse practitioner from a local community health centre visits the program every week and provides health care to the residents.

The house is located across a lane from the homeless emergency shelter, which is also operated by Shelter House. There are a number of communal living spaces in the house where the clients can cook, watch television or do other activities. Individuals participating in the MAP are provided housing in a similar style to that of a rooming house. Thus, residential tenure in the house is contingent on their participation in the managed alcohol program. Criteria for the admission to the program include severe alcohol dependence, chronic homelessness and high rate of police contact. Candidates for MAP are identified by Shelter House staff, the Thunder Bay Police Service, and other care providers that interact with this population group. The Centre's population is made up of both men and women and all identify as Aboriginal. Every effort is made to ensure that program participants' level of intoxication is not dangerous and allows them to function reasonably well. The intention of the program is to replace a dangerous pattern of episodic, very heavy drinking, and non-beverage alcohol drinking, with a maintenance dose of beverage alcohol in a supervised setting.

From the inception of Kwae Kii Win Centre, the Shelter House Board and Executive Director (ED) gave high priority to evaluation. In late fall 2012, University of Victoria researchers contacted the Shelter House ED to gauge the organization's interest in participating in a national evaluation of MAPs in Canada based on a pilot evaluation conducted in Vancouver by the same researchers. CIHR (Canadian Institutes of Health Research) approved funding for the national study in June, 2013. However, since the research protocols and instruments had already been developed it was decided that the national evaluation protocol would be implemented early at Kwae Kii Win Centre. The evaluation was initiated in January, 2013 and included hiring a local research assistant (Krysowaty) and engaging a Lakehead University researcher (Gray) with expertise and interest in the area.

3.1 Ethical Considerations

Upon initiation of the program evaluation, MAP participants were offered the opportunity to participate in the research study. They were provided with information about the study and a researcher reviewed the consent form with them at baseline, monthly and 6 months follow ups. The consent form also

included permission for the research team to access hospital, police and shelter records. Control participants were recruited at the shelter next door and a similar process was followed. Control participants met the criteria for entry into the MAP but due to space or choice were not participants in the MAP, although some did become participants during the course of this study. Participants were compensated for their time and received a coffee shop gift voucher worth $25. Ethical approval for this study was obtained from the University of Victoria and Lakehead University Human Research Ethics Committees, Thunder Bay Regional Health Science Centre (TBRHSC) and St. Joseph's Care Group (SJCG) research ethics committees.

3.2 Research Design

We conducted a small-scale mixed methods study designed to collect in-depth information and perceptions from staff and MAP participants about health, wellbeing and participants' drinking behaviour over the first 6 months following initiation of the program evaluation. We included a control group to determine whether observed benefits or harms experienced by participants were due to the program. The purpose was to implement methods appropriate for a larger multi-site study and also identify both promising practices and any difficulties experienced at the outset of this pioneering initiative. MAPs are a package of measures, the provision of regulated doses of alcohol being but one component. Furthermore, there are seasonal rhythms in the drinking patterns and lifestyles of homeless populations in Thunder Bay in response to the prevailing weather and outside temperatures. Many individuals also reside in Thunder Bay for part of the year and return to their, often remote, Aboriginal communities for significant lengths of time. In some cases it was not possible to conduct monthly follow-ups for this reason. These factors will be considered in the discussion of the results.

3.3 Qualitative Interviews

3.3.1 Resident Sample for Qualitative Interviews

Seven participants with at least one month's experience in the MAP were recruited to obtain their perceptions and experiences in the program. These participants were recruited through notices and verbal communication about the project. Four men and 3 women indicated their interest in being interviewed. The interview questions were open ended with specific prompts to explore perceptions of the program (benefits and challenges), impacts of the program on health, relationships, drinking and overall quality of life. The interviews were conducted by a member of the research team (Gray) who has experience and expertise in qualitative research and the interviews were conducted at a time and place convenient to residents (See Appendix 1 for interview questions). All participants were given the opportunity to answer or refuse to answer any questions and informed consent was obtained. The average age of the 7 participants was 38 years with a range of 25 to 49 years. All identified as Aboriginal. The average length of time that they had spent in the program was 12.75 months. Thus, these participants had considerable knowledge and experience in the MAP. This provides an important perspective on the MAP. As part of the national study, we will specifically recruit individuals who have less experience or have left MAP to gain a variety of perspectives. Prior to entering the MAP, all had been emergency sheltered or staying outdoors. All of the interviews were tape recorded and transcribed verbatim. Each interview was read and re-read by two members of the research team and

coded inductively for key ideas and themes that described their experiences of being in a MAP related to health, housing, quality of life and harms of alcohol use and drinking patterns (Gray and Pauly). An inductive coding framework was developed and NVIVO was used to organize and manage the data. This is consistent with processes for qualitative descriptive content analysis (Sandelowski, 2000; Sullivan-Bolyai et al, 2005).

3.3.2 Qualitative Interviews with Staff

During the evaluation period, staff were invited to participate in open ended qualitative interviews to share their perspectives on the goals of the program, planning and introduction of the program, program operations including benefits and challenges, as well as key issues that had emerged since the beginning of the program (see Appendix 2 for staff qualitative interview questions). The interviews were conducted either in person or by phone and lasted from 30 minutes to one hour. The interviews were audio-taped and transcribed verbatim. In total, four interviews were conducted with a range of staff who had varying levels of involvement in the program. Participants were provided with a copy of the study consent form and interview questions in advance. The process for analysis was the same as that described above for resident interviews.

3.4 Quantitative Measures

3.4.1 Participant Characteristics: Survey Sample

As summarized in Table 1, of the 18 MAP participants who consented to participate in the in-depth surveys, and interviewed at baseline, 7 were female. Eight of the 20 control participants were female, and the rest identified as male. All 38 research participants self-identified as Aboriginal. The mean age was 42 years (range 25-61) for MAP participants and 37 years (range 21-50) for controls. Approximately two-thirds of all participants did not complete high school, half had never been married and all were currently unemployed. In comparison with MAP participants nearly all controls reported staying in an emergency shelter the previous night.

Table 1: Participant Characteristics

	Controls	**MAP**
Age (mean, range)	36.8 (21-50)	41.7 (25-61)
Female	40%	38.9%
Aboriginal	100%	100%
Finished high school	40%	33.3%
Married	50%	55.6%
Unemployed	100%	100%

Alcohol Use Disorders Inventory Test (AUDIT) scores obtained from the baseline and 6 month follow-up survey for MAP participants and controls were all in excess of the cut-off of 15 deemed to indicate likely alcohol dependence. The range in AUDIT scores for the MAP participants was 21 to 36 and 16 to 40 for the controls, and the mean for both groups was 31. Severity of Alcohol Dependence Questionnaire

(SADQ) scores ranged from 9 to 51 for controls and from 10 to 55 for MAP participants. Nine of the 16 participants and 9 of the 19 controls completing the scale scored 31 or higher on the SADQ, a score indicative of severe alcohol dependence. In response to the baseline interviews, both participants and controls reported consuming similar amounts of alcohol on a drinking day, in both cases this was assessed as being approximately 20 standard drinks after taking account of typical concentrations of products such as hairspray, mouthwash, aftershave and rubbing alcohol. Participants reported on average drinking 19.2 standard drinks on a drinking day in the previous 30 days at baseline whereas controls reported drinking 20.9 standard drinks.

MAP and control participants reported consumption of non-beverage alcohol variously including mouthwash, hairspray, cooking wine, hand sanitizer, and rubbing alcohol. As reported below in more detail, most MAP and control participants were also assessed on the WHO-BREF as being in quite poor mental and physical health at baseline. All of the MAP participants had been accessing a homeless shelter or living on the streets prior to entering the MAP.

A smaller sub-sample of MAP and control participants were followed up monthly and completed a shorter version of the interview with a researcher at a monthly check in. Through the course of the study, six MAP participants and 10 control participants were selected for follow up. We were able to conduct brief monthly check-ins with almost all of these participants. At six months, we were able to repeat the in-depth baseline surveys with 5 MAP participants and 5 controls. Some participants were not interviewed because they had not yet been in the study for six months. All participants received a stipend for completion of these interviews. See the Appendix 3 for in-depth survey instrument followed by the shorter monthly version of survey instrument.

3.4.2 Participant Surveys

In-depth surveys were completed at baseline with shorter follow-up interviews conducted monthly until the 6-month mark when an in-depth follow-up interview was conducted. All interviews were conducted with MAP participants and carefully selected control participants at a ratio of one MAP participant to two control participants. Participation in the evaluation was voluntary. Self-reported measures and objective measures (liver function tests and alcohol administration data) provided the opportunity to triangulate across multiple sources of data. The MAP and control participant interviews covered the following domains:

(i) socio-demographic characteristics;

(ii) housing status over past 12 months;

(iii) alcohol and other substance use: lifetime, past 12 months and other more recent periods mainly using an existing instrument from the BC Alcohol and Other Drug Use Monitoring Survey questions (Duff et al, 2009) ;

(iv) severity of alcohol-related problems and degree of alcohol dependence, measured variously by the Alcohol Use Disorder Identification Test (AUDIT, Saunders et al., 1983), the Severity of

Alcohol Dependence Questionnaire (last 3 months version; Stockwell et al., 1994) and the WHO ASSIST for alcohol and also six other substances (Henry-Edwards et al., 2003);

(v) health and mental health: WHO-BREF and WHO-EUROHIS (The WHOQOL Group 1998; Skevington et al., 2004; Schmidt et al., 2006; Power 2003);

(vi) housing quality: instrument developed by At Home-Chez Soi project (At Home/Chez Soi National Research Team 2010);

In addition, questions were included on income, contact with law enforcement and health care providers, housing, and quality-of-life. Control participants were asked 4 open-ended questions regarding whether they would use a MAP if it was available and whether it would give them benefits.

3.4.3 Liver Function Tests

Blood samples for liver functions tests were collected by a nurse practitioner from a nearby health clinic at intervals throughout the program. In some cases liver function test results from MAP and control participants' health records were used. Liver function tests included: Aspartate transaminase (AST), which measures acute liver damage and has a normal range between 5 and 40; Alanine transaminase (ALT), which measures the presence of an enzyme in liver cells and has a normal range between 7 and 56; and Gamma glutamyl transpeptidase (GGT), which measures liver dysfunction and has a normal range of zero to 65 for males and zero to 45 in females. Factors other than alcohol consumption can affect liver functioning on these tests e.g., hepatitis, nutrition, and body weight. We consulted an international expert on the management of alcoholic liver disease in the UK (Dr. Jonathan Chick, consultant psychiatrist, Edinburgh University) who advised that alcoholic liver damage was likely if the following criteria applied: (i) a threefold or greater increase in GGT or AST above normal levels, and (ii) AST score at least half that of ALT (Nyblom et al., 2004).

3.4.4 Alcohol Administration Data

Daily documentation by staff of: number of doses per day, time of administration, type of MAP alcohol consumed if different from wine, and number and type of outside-MAP beverages. A 6 ounce glass of 12% strength wine was the standard dose, equivalent to 1.2 Canadian standard drinks, 20.46mL or 16.1g of pure alcohol. Doses were withheld until the next dosing time if clients had not been continuously present for, initially, 90 minutes beforehand or were unsteady on their feet or appeared unstable, had slurred speech, or were obviously slow to respond. Later the requirement to be present prior to the next dose was reduced to 60 minutes.

3.4.5 Data on Hospital and Emergency Room Records

Permission was granted from the Thunder Bay Regional Health Science Centre (TBRHSC) for the research team to access individual level data for participants and controls regarding hospital admissions during the five years up to August 31st, 2013. In the present evaluation, the number of admissions per 100 days is compared for participants while on the MAP versus when they are off the program and also with the average rate of admissions per hundred days for the control participants over the whole period. The

length of time admitted during these periods was also taken into account in the calculations of rates of admission per hundred days i.e. by subtracting days in hospital from the time period in question.

3.4.6 Data on Alcohol Detoxification Episodes

Permission was granted by the St. Joseph's Care Group for the research team to access individual level data on admissions for detoxification/withdrawal management during the five-year period up to August 31st, 2013. Numbers of these treatment episodes per hundred days were estimated in the same way as for the hospital admission data, also taking account of time spent in hospital in these calculations.

3.4.7 Data on Police Contacts

Data were obtained on consenting individuals from the Thunder Bay Police records regarding dates and types of offences in the 5 year period up to August 31st, 2013. Data were collated for each individual so as to be able to compare numbers of incidents per 30 days while on or off the MAP and in comparison to controls.

4.0 Results

In the following section, we provide an overview of both the qualitative and quantitative findings obtained during the 7 months of active data collection for this evaluation. In each section, we begin with an overview of the qualitative findings from both program and staff participants followed by a presentation of the quantitative results. The quantitative measures and results from baseline, monthly and 6-month follow-up surveys for both MAP and control participants are presented in aggregate form with data from all 37 participants reported at baseline. Averages are reported for the sub sample followed monthly and at six months. Data from the alcohol administration records are reported for the first 6 months of the program evaluation, and analyses of rates of police contacts and healthcare episodes are provided for participants and controls.

4.1 Qualitative Data on Overall Appraisal of MAP by Participants and Staff

All the MAP participants expressed that participation in the MAP was beneficial to them and had positive impacts on their lives. In particular, they highlighted that the program gave them access to housing, home, health and hope. As expressed by one participant, there is hope for a better future:

> "With the situation that I was that I was in, the situation that I put myself in, is I put myself on the street and I have nobody to blame for that. But this program … has given me hope and has allowed me to really think what I wanna do with the rest of my life. And because I was stuck, not stuck, I was I guess you could say rock bottom, you know going home couldn't get me out of that rock bottom that I was in. But since coming here it's kinda given me, like I don't know the word I should use, like I know there's a horizon waiting for me."

This participant went on to talk about how their health had improved and they were no longer drinking non-beverage alcohol but commented on the sadness associated with those who are still on the street and not able to access something like the MAP. Staff highlighted that their main goals were to reduce harms of alcohol use and improve quality of life.

All of the participants highlighted that they felt safer in the MAP than on the streets or in other programs they attended for substance use problems (e.g. detox and treatment). Both residents and staff indicated that the program was different from other programs because of the non-judgmental approach to substance use. For example a staff person stated, "I think the program is just about providing housing that is completely non-judgmental." Staff highlighted that the program enhanced both physical and emotion safety by providing housing that is free of judgment. For example, one staff member stated,

> "Giving them respect without them earning it, it's just automatic respect …. Like for anybody to respect me, I have to show them respect, but if I don't respect a client because oh I don't like that person he's just a fall down drunk and he's useless, it's just a waste of time trying to help him, no that kind of attitude doesn't work. And I think for me respect, ….you have to show them that. Because if they don't see that, it's not gonna work."

Residents indicated that they felt safer in MAP than in other substance use programs because of increased experiences of being trusted by staff and less judgment around substance use. Residents and Staff described Kwae Kii Win as much safer than being on the street where you don't know where your next meal is coming from; you have to sleep with one eye open, with the ever-present threat of physical violence.

The housing aspect of MAP clearly contributed to feelings of safety as did the presence and actions of staff and the freedom from judgment about alcohol use. Participants expressed appreciation for having a roof, a room and housing. Some participants, like the one above, described the program as a stepping stone to a better future. Participants consistently described the program as a home and staff as family. Staff also highlighted the feeling of family that pervaded the program. Through the program, they reported improved quality life for participants as a result of reconnection with family, re-learning life skills as well as feelings of better health and better access to health care services

Overall, participants were extremely positive about the program but they also highlighted challenges that they thought could be addressed to improve the program. Positive benefits that participants attributed to participation in the program included feeling safer in housing, improved quality of life including reconnection with family, better access to health care services, and decreased consumption of non-beverage alcohol. Challenges included living in a shared space and lack of private physical space, conflicts between residents (although most were handled by the staff), restrictive managed alcohol protocols, and desire for more programming, particularly cultural programming. Each of these challenges will be examined in more detail later in the report. Both the positive impacts of the program as well as the challenges will be highlighted in the rest of the report and in relation to each aspect we examined in the evaluation.

4.2 Did Housing Quality and Satisfaction Increase?

4.2.1 Overview

Overall, participants in the qualitative interviews clearly expressed that housing was a highly valued aspect of the program. The availability of housing and presence of program staff increased feelings of

safety and contributed to the harm reduction goals of the programs. The great majority of MAP participants (14/17) retained their housing in the program during the study period whereas controls remained homeless. Participants' ratings of their satisfaction with their housing were significantly higher than controls' on length of stay, safety, spaciousness, privacy, and overall quality. Some tensions were expressed around the requirement to be in the building 90 minutes before alcohol administration and with occasional room searches for alcohol but mostly participants appreciated that these were a necessary part of the program.

4.2.2 Qualitative Analysis: Enhanced Safety and Housing Quality

Housing, as part of the program, provided safe refuge from the harms of the street and the emergency shelter. The MAP was described as safer than staying outside. For example, "You feel safe, you feel like you've got a warm place to stay, and some home. You're not outside sleeping and wondering what to eat next." Another resident stated, "Most of the time I do feel safe and secure since I've been here. Whereas before I used to sleep with one eye open, or my [friend] would be the one staying up because we're sleeping outside on the street."

Many participants spoke about the dangers of the street and that the MAP, in sharp contrast, was a safer environment for participants. One female participant indicated that without MAP, she could be another statistic among a growing number of Aboriginal women found dead on the street. In another example, one participant highlighted how the program meant that he didn't have to find places to sleep outside and stayed out of jail because of the program.

> "Yeah and like ever since this program's opened, it's kept me away from the street life as I was saying and the jails… The police, like they bring me here now, I don't have to worry too much about …trying to find a place out in the community like underground or in a jail cell. At least now a days [police are] bringing me directly here. I don't end having to look around or actually kinda break into cars or well I don't really, they're not really broken into cause they're already broken down, ….they're just open and I go crawling in and I crash out. I don't have to worry about it, I think any more ever since this program started."

Several examples were provided by resident and staff participants that indicated police regarded the MAP to be a safer place to bring people to than jail. Additionally, the MAP provided a safer alternative to jail and police enforcement as a response for dealing with problems of public intoxication.

The fact that staff were there and checked on residents also enhanced residents' feelings of safety.

> "They check up on us when we're sleeping, see if [we're ok]. Yeah it's not like when you're on the street there, when somebody sees you they don't know how long you've been there and first reaction 911 …or the cops."

One resident highlighted how initially they did not like the security cameras but after a period of time reframed these as contributing to safety.

> R: Yeah, when I first moved in here, it was like moving into a prison, eh, but a month later I…yeah, it was a good idea.
>
> I: How come?
>
> R: I felt a lot safer. Not like next door. Especially when you're injured…. But, like next door, they'll attack you if they don't like you. But over here they respect you. And the staff is there all the time. That's what I like about this place. Yeah, there's a lot of things I like about this place.
>
> I: So the staff are there all the time. How does that make you feel safer?
>
> R: Because they have monitors at the office, so if there's a fight going on– like, I haven't seen too many fights here, but, like, maybe I've seen a couple of fights here. Yeah, there's- seen a couple, couple of fights, but the staff is there all the time.

Having housing meant that participants had a place to stay and space in which to take care of the basic necessities of life. Several participants highlighted that in the emergency shelter you have to leave the dorms at 8am and there is not much else for them to do. In contrast, in the MAP, there is a place to be and space in which to take care of activities of daily living. For example,

> "…you can watch TV all day if you want and you use computer and do your laundry and…you just have your space."
>
> "…you don't have to leave at eight o'clock in the morning. You can stay here all day if you wanted to….Because we – you have showers at least every couple of days. And we do our wash. And we have…we have the phone any time you want. And we got internet. Yeah. Yeah, yeah, and…I think that's pretty good….You can't find a place like this anywhere. Even though we pay six hundred dollars a month, like,…that's pretty good I think."

This participant highlights the importance of having space for activities of daily living and a space that is affordable. Overall, the MAP provided an alternative place to hospitals, jail and the dangers of the street, a place to take care of basic activities of daily living, and a place to reconnect with family and reground their lives.

Some participants, in talking about the enhanced safety provided by MAP, described the program as more than housing but as being a home and the other residents and staff as family. As one participant said, "You have a place, you have a home." Like residents, staff highlighted a similar sense of the program as being a home and residents as part of a family. One staff stated,

> "They have a safe place. They know they have a place to come home to. They work as a family together. Like, when one is sick, they're worried. They care about each other, like you know, they're like a family together. And a lot of them are related."

Staff play a key role in creating a safe environment for residents and buffering situations with peers outside the program. For example, at the request of residents, staff will screen phone calls and visits

from peers not in the program. Residents appreciate how staff members sometimes act as gatekeepers helping them to prevent or lessen such contact that can potentially jeopardize their efforts to avoid non-palatable alcohol.

> "The staff, like they say, you wanna go outside [to see your friends]? I don't wanna go out …and I know what they are here for, they got some drinks…Yeah, I tell them I don't wanna go out and [the staff] just say 'He's not in,' or 'He's sleeping'.

> "If you wanna be you know not bothered or whatever the staff are really, really supportive of that you know. And sometimes you know if get, keep getting bugged, bugged on the ... street and if you tell them [referring to staff] that '…just tell 'em I'm not home,' and you know '…just tell 'em I'm not home,' even though you're sitting upstairs watching TV or whatever. So outside people don't, so they don't influence you to… go out and drink that other stuff. Because here, is still quite a bit of people that come here bringing in that other stuff like into the yard and all that, and a try to get us to go out and then all that. And now I, it doesn't bother me now, if there's something wrong I'm not going out, not going out for that you know."

Residents appreciate that staff watch over them when they are feeling vulnerable such as when they are sleeping, in conflict with another resident or when they are injured. In particular, staff also helped to enhance safety and buffer conflict between MAP residents. One resident described staff as being a referee. In the example below, a staff person stayed with one resident until another resident fell asleep to decrease conflict and increase feelings of safety.

> "There was a few times that, when a resident was picking on me … and then I had to ask one of the staff to come and sit with me … and then I would tell him I wanted to go to sleep, and he'd stay here until she goes to sleep. So he would stay [with me] until she fell asleep. She doesn't bother me no more."

Resident reports suggested that conflicts were much less in MAP than in the shelter or on the street and that that staff helped to mitigate conflicts between residents and other peers. One participant described the problem of 'butting heads' as the only real problem in the program. In some examples, the challenge appeared to be related to the shared living space. For example, sharing bathrooms raised issues between genders when used sanitary supplies were left in the bathroom. However, this resident acknowledged it was probably a big change in moving from outside to inside, explaining why the person didn't think to dispose of the used supplies.

Like the example above, some conflicts between residents seemed to emerge when new participants entered the program. This is not surprising given that in this and other MAPs, staff have identified that there is a period of stabilization needed for new residents. In Vancouver, this was handled by moving residents into housing first before starting MAP. In Ottawa, the stabilization program is set up at a different location and participants are only moved to longer term residence after a period of assessment and stabilization.

Residents also highlighted concerns related to the introduction of a dosing protocol whereby residents had to be present 90 minutes prior to receiving their dose. While they understood that this was needed to discourage drinking off the program, several residents identified that this policy made it difficult to undertake activities outside the program, and contributed to a sense of not being able to leave the program, even though concessions were made for residents who kept outside appointments. Also, some residents mentioned that while they understood the rationale for room searches they didn't really like them and wondered if there were better ways to find illicit sources of alcohol being brought into the program. Residents were quick to place these challenges into the greater context of safety that the program provided and tended to minimize such concerns as minor when compared to dangers outside of the program. These challenges while worthy of consideration are smaller in comparison to the shift in feelings of safety and reduced harms associated with moves from the street and shelter into the MAP. Although we did not specially ask how these challenges might be addressed, it may be that residents also have insights into potential solutions.

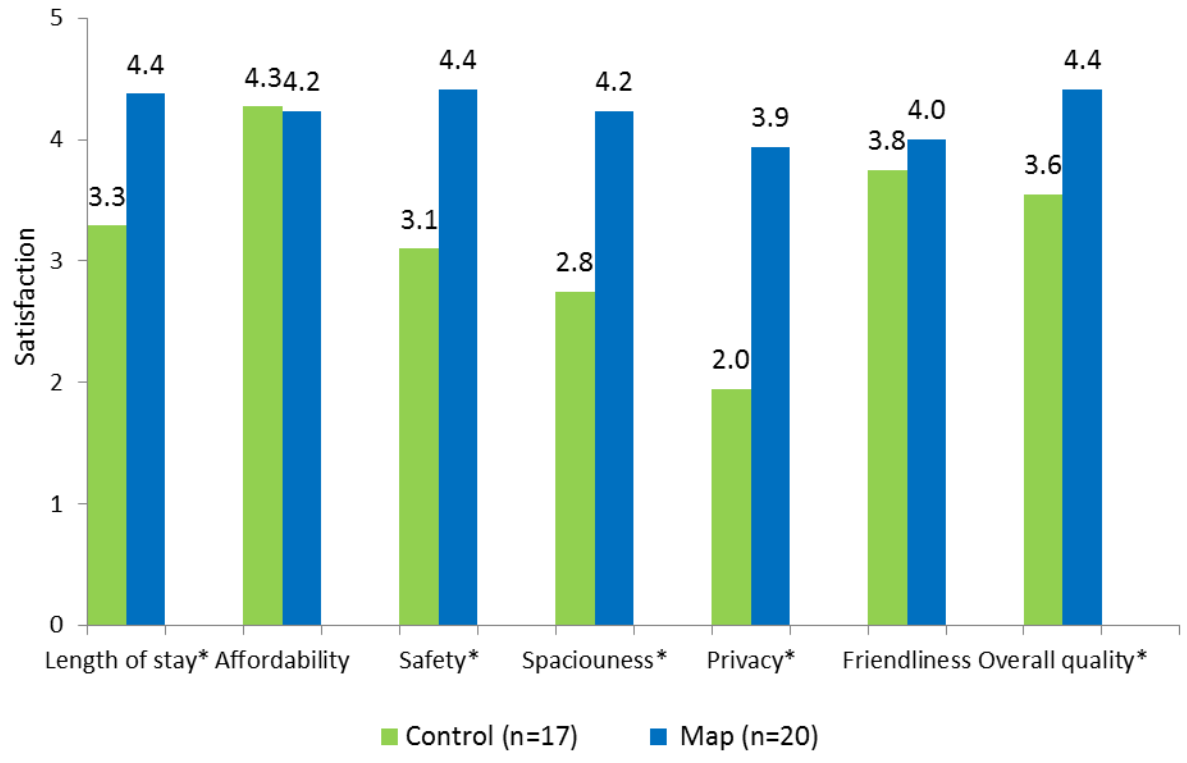
4.2.3 Quantitative Analysis of Housing Retention and Housing Satisfaction

MAP participants were all homeless as defined by Canadian Definition of Homelessness (Canadian Homelessness Research Network, 2012). All were staying in the emergency shelter, living outdoors or couch surfing prior to entering the MAP. About half (45%) of the controls had been homeless for more than 3 years. Similarly, at baseline, 55% of the MAP participants had been homelessness for more than 3 years. At baseline, 29% of the controls and 47% of the MAP participants indicated that the most frequent reason for not having permanent housing was alcohol and/or drug use. Of the 17 MAP participants that we could follow during the study period, 14 retained housing as part of the program. The length of time that MAP participants had been in the program varied from 8 to 80 weeks. Of the 20 controls, we were aware of 7 controls at 6 months who were still homelessness. This suggests that the MAP facilitates housing retention.

At baseline MAP participants as a group rated themselves as significantly more satisfied with their shelter accommodation in terms of length of stay, safety, spaciousness, privacy, and overall quality than did controls (t-tests, $p<0.05$ in each case, see Figure 1). There was no difference between MAP participants and controls on perceived housing affordability even though MAP participants contribute a

proportion of their income to MAP.

Fig.1



* Indicates statistically significant difference between groups

4.3 Were there Improvements in Mental Health and Well-Being?

4.3.1 Overview

Residents and staff reported an improved quality of life in qualitative interviews, as evidenced by improvements in mental and physical health, reconnection with family, and improved life skills. They reported learning communication skills, self-care, relationship skills, and money management skills. Participants in the MAP rated their psychological wellbeing, the quality of the environment they lived in and their social relationships higher on a standard scale than controls.

4.3.2 Evidence from Qualitative Interviews

Reconnecting and experiencing family was described as a major positive change of being in the program expressed by residents with positive impacts on mental health and wellbeing. Many participants described reconnecting with their families of origin within and outside of the MAP and described the MAP residents and staff as being 'like family.'

> "Yeah, we think of each other as a family. When there's a new person that comes in we welcome them with arms open. And we see they need to be [guided] for the first couple of

> weeks and we take them [and we teach 'em]. And we, ah, show them around and if they need something I'll show them where to get it for, where to ask for it."

They also described instances of cooking together and eating together in the program as being like a 'big family.' Several participants mentioned how residents watch out for each other and make sure they take their medications and generally ensure they are okay. The quote above also suggests that participants provide each other with peer support and mentoring. These experiences of family were highlighted as a positive impact of the program on well-being.

For many residents, reuniting with their families had a deep impact on their well-being. Participants described reconnecting with their mothers, fathers, aunts and uncles, children and grandchildren since coming into the program. In some cases, MAP provided an opportunity both to reconnect and a place to have family visits. Perhaps being reunited with their children was seen as most impactful as they see their improved life standards through their children's eyes. For example, one female resident described the following scenario in which she had begun to reconnect with her children:

> R: "I know you're still drinking, mum, you know, but at least you're not on the streets, …we don't have to worry about you. We know where we can find you and you know…"
>
> I: You're not missing.
>
> R: I wonder how many times …they think that it's me that's dead out there when they find a Native woman. You know I don't know how it's been over the years since I've been on the street. I think five, maybe five native women…that passed away, you know. They …we thought that was you, but they don't release the name, they're just on the Chronicle Journal.

This quote highlights the dangers of being on the street, especially for Aboriginal women, and the safety provided by the program. The opportunity to reconnect with family within the program has potential implications for shifting not only immediate familial relationships, but also for changing the cycle of intergenerational trauma as so poignantly described above. Now that families know their loved ones are in a stable program/housing, they come and visit more frequently than when the family member was living on the street. One resident described how family was slowly starting to come and visit more:

> "Ah, I was kinda surprised, but when they see me they're almost crying, they have a big smile. They see that I have, there's changes in me like, I 'm trying hard to change, it doesn't happen like the snap of a finger, doesn't take overnight."

This resident went on to describe that instead of them seeing their family member being brought home by police and watching them in withdrawal (e.g. witnessing dry heaves, hallucinating, sweating and pain), the resident reported that "…we go for walks sometimes, we go to the dome, go play mini golf or go to the movies every now and then." These reconnections have significant potential to shift intergenerational relationships and familial healing.

One resident indicated reconnection with family was therapeutic, even though many family members were still 'iffy' about them. The reconnection with grandchildren and kids was an important milestone, "…because I see how responsible adults they've grown up to be and you know, I missed all that, you know. And I feel sad about it, … at the same time I feel encouraged, like, they never gave up on me…" This resident indicated that the reconnection with children and grandchildren encouraged them to stick with the program.

Both staff and resident participants indicated that the program had a positive impact on self-esteem and feeling of self-worth. One staff person stated,

> "I know nothing works perfectly and there is no perfect solution, um, yeah, it's working because I'm seeing people that are that are becoming more stable and more… they seem to have more self-esteem, they're taking care of themselves, they dress better, they bathe, you know and they eat and whereas before when I saw them, when they were homeless, they, it was totally different."

Residents' comments also illustrated how they are taking better care of themselves and regaining a better sense of self. .

> "Before I came here, I wouldn't care what I was wearing or what I ate. I used to crawl into dumpsters, get something to eat, start drinking anything too, cause, this really helped me and really opened my eyes to see what I was doing to myself, and ever since I've been goin' in and out of the hospitals and basically just sticking with the program, been helping a lot."

As one resident indicated, they were missing a part of themselves on the street.

> "It's like [clears throat] that there was a part of me missing when I was out on the streets. I pan handled, dig in the garbage, I'd steal food, just to survive. And like, I didn't have anybody, like when I'm here, I have everybody and I try to make everybody happy."

Another highlighted how they are getting rid of the "garbage" that stood in their way previously and undergoing a process of "recycling."

> "But for me I was so full of garbage that there was no room for something good to come in, you know. And now I'm unloading my garbage and um, I guess you could say I'm ah, recycling myself. You know, get rid of the garbage and start putting good things in me, you know, like getting to know my children."

These examples highlight how being in the program gives residents an opportunity to become re-grounded in their lives and increase feelings of worth and esteem.

Residents and staff also highlighted how as part of the program, residents are regaining and re-learning life skills. They are learning communication skills, self-care, relationship skills, and money management

skills. One resident described a better ability to stand up for themselves and communicate with other residents.

> R: I'm learning how to speak up for myself other than just shrink away when, you know, somebody doesn't… agree with what I'm doing.
>
> I: Has being the program helped you speak you mind?
>
> R: Yeah, but I speak it in a way where I don't offend the other person. I speak in a way that where, I feel that I'm, you know, not being treated right. I don't say to a person, you know, "Oh you, this how you, this is what you're doing to me," ah, you know. I'll say this is how you feel when you know when this happens. I don't single out a single person I just… but the person knows who I'm talking about, know.

In another example, a resident pointed out how they are relearning skills of having a home that they lost while being homeless.

> "To bake, because at the same time, the program is… teaching us to be in a home. You know, not like what we're used to, out on the street. For me anyway, teaching me. Like relearning how to be in a house with responsibilities: got to make your bed, do your laundry, sweep, wash the floor, do dishes, and of course, we're starting to cook. When a person cooks, they cook for the whole house, eh. Or just… most of us I think are just relearning domestic, domestic…things that you would normally do in a home. It's another one of the benefits that we get living here. Everybody gets to, you know, help each other."

This person also expressed the hope of finding a place of their own. One of the staff also highlighted that residents are not necessarily learning new skills, but getting the opportunity to use skills learned earlier in life.

> "Sure, and I just want to say something about the life skills. I want to say that I actually don't believe that people are starting from ground zero with life skills. I just want to clarify that we're not necessarily teaching, quote unquote, life skills. I think people do have life skills. They're different life skills than ours. I think the notion of life skills is very North American dominated. You know, that you should learn how to bank, and you should learn how to, you know, get up at 8:30 and make your bed, and all that kind of stuff, is all very from a North American lens. I don't know how to cook moose stew. You know what I mean? But somebody else knows how to prepare wild meat. They have life skills, and what we're doing, I think, is enabling them to use the life-skills that they have."

This is an important perspective that reframes the way in which programming can be provided that accounts for cultural sensitivity and recognizes life skills as well as building on existing skills. Another staff member indicated that there are opportunities to reconnect with cultural programming outside of MAP.

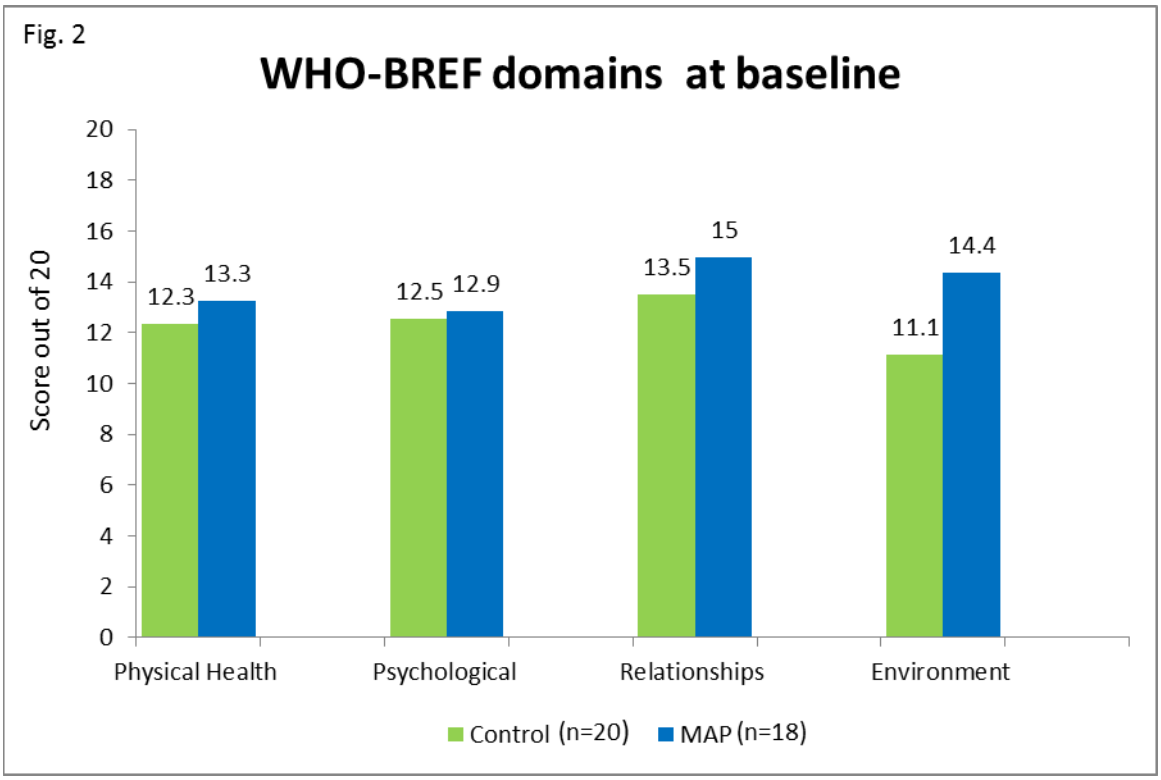
> "For anybody that wants it, there are programs around the city that we try and help them to participate in, like the healing circles and their own cultural things; like, ah we have elders that come in and talk to them, and there's all kinds of good things and those are all benefits for the people and the program. And whether they use it or not, that's another thing but it's there, the chances are there, eh, everything is available for them. And if they want to, ah, pursue treatment and change, do what they can to change their lives, then it, the help is there. And we're there at any time, anytime anybody wants to talk to us, if they're depressed or anything, like, we are there to listen. And we're very supportive."

These positive comments about staff being supportive are echoed by residents who expressed appreciation for the way in which staff provide a safe environment and buffer relationships between residents and peers outside the program. The extent to which residents are able and ready to access supports as outlined above is not clear, but it is evident that they are available if and when a resident is ready. At least one resident expressed a desire to reconnect with her culture as part of her healing. This raises a potential area of growth for the program as residents stabilize.

4.3.3 WHO-BREF Health and Wellbeing Scores

The WHO-BREF is scored on a scale of 1 to 20, with 20 being optimal. As shown in Figure 2, both the MAP participants and controls scored at levels indicative of compromised health and well-being at baseline. On each of the four domains, MAP participants (most of whom had been resident in the program longer than 120 days) scored higher than the controls; in one case (rating of their living environment) this difference was significant.

Fig. 2



4.4 Were there Improvements in Physical Health?

4.4.1 Overview

In the qualitative interviews, participants commented that they were eating much better and had better access to health care services than when on the street. As would be expected from this population, the ratings of physical health on the WHO-BREF scale for both participants and controls indicated compromised health and functioning. In the sub samples followed up over 6 months, these ratings indicated further declines in health for both participants and controls. Out of the 13 MAP participants for whom complete liver function tests were available during the study, 10 had results indicative of alcoholic liver damage. However, examination of individual test results for program participants over time showed that, in the great majority of cases, test results were improving.

4.4.2 Qualitative Interview Responses Relevant to Physical Health

Residents and staff noted improvements in physical health. Several residents described eating more since being in the program. For example, "You don't get as much food on the street as you do here I guess." Another participant stated, "You got more food in here than everyone else, any one of us has got more food in here probably in your life ever." As described earlier, residents are cooking together and learning to cook. One participant emphasized the focus on healthier foods:

> "I'm starting to cook a lot more now, like I've been cooking healthy foods and trying to make sure to keep most of the people ('s) blood sugar on a normal level."

Several residents reported improved physical health in their interviews. For example,

> "I can walk and 'cause I have a hard time walking, eh. But I was really bad when I first came here. I couldn't even lift a cup, 'cause I didn't take my medication, I didn't take my medications or nothing like that. The only medi-, the only painkiller I used to have was just to drink and I'd be able to be at least, you know, mobile and all that…but now I can walk, I can do dishes and I can you know, do things I wouldn't been able to do when I was on the street. 'Cause I was sick most of the time."

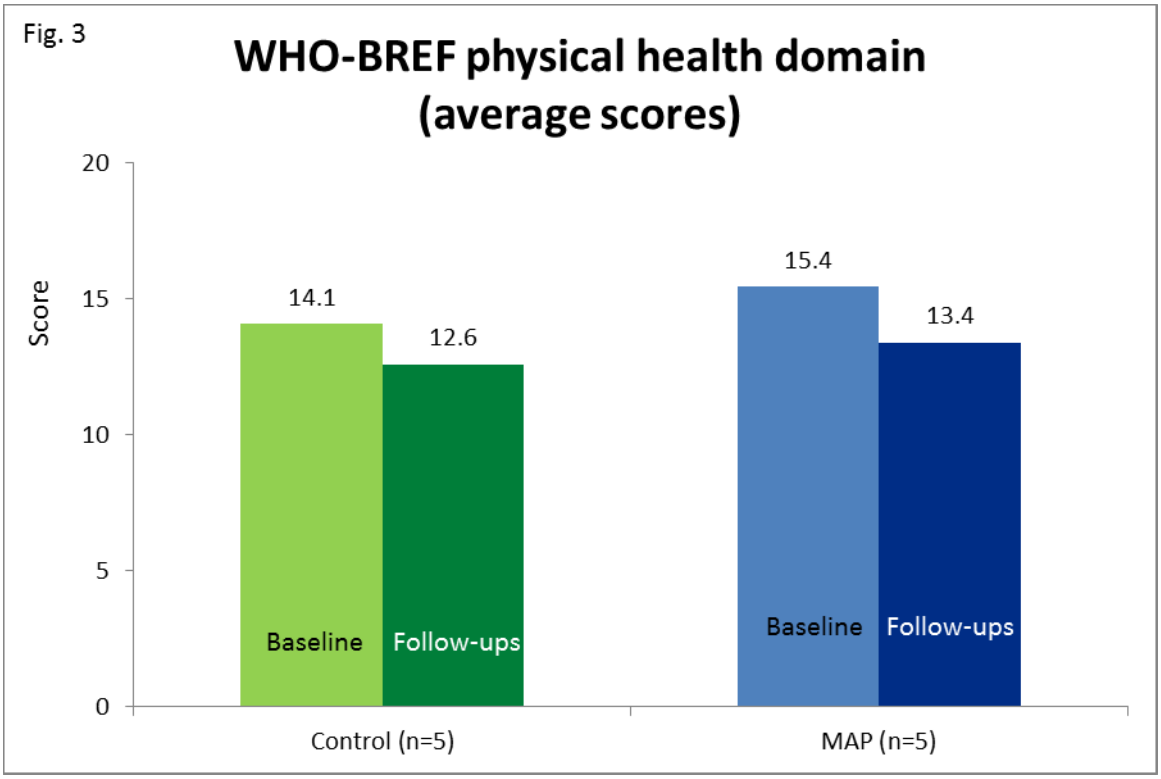
This resident highlights how their physical health has improved in the program and this has made it possible for them to do things they could not do before.

The qualitative interviews with staff indicated there was improved attendance at, and access to, health care whether delivered directly by nursing staff at the main shelter or by referral to other services.

4.4.3 WHO-BREF Physical Health Domain Scores

The full-sample mean scores from the WHO-BREF physical domain were similar for MAP participants and controls, mostly indicative of sub-optimal health. The average scores for the follow-up subsamples of controls and MAP participants indicated that self-reported physical health declined by a similar degree between baseline and the 6 month follow-up period (see Figure 3).

Fig. 3



4.4.4 Liver Function Tests

Some liver function tests were completed or available from previous health records for 13 MAP participants and 4 controls. Available scores from prior to entry into the MAP and while on the MAP for GGT, AST and ALT, as well as the same tests for control participants, are summarized in Table 2. These data show that at some point before or after entry to the program 10 of the 13 MAP participants had results indicative of liver damage. Of those who had comparable repeated tests, 7 of 8 showed reductions in AST or remained within normal ranges, 8 out of 11 had reductions in ALT or remained normal, and 2 out of 2 had reductions in GGT. There were insufficient data available on controls for any comparison, though 3 control participants had raised AST and one had raised ALT when tested.

Table 2: Recorded Liver Function Test Results for MAP participants and controls, abnormal results in yellow highlight

ID	Date of test	Times of tests pre or post MAP	AST (5-40)	ALT (7-56)	GGT (M0-65, F0-45)
MAP participants					
1001	March 25, 2011	54 weeks pre	122	127	
1001	April 10, 2012	1 week post	99	187	744
1002	June 17, 2013	37 weeks pre	87	90	264
1004	March 8, 2012	2 weeks pre	225	56	1253
1004	April 2, 2013	54 weeks post	99	31	803

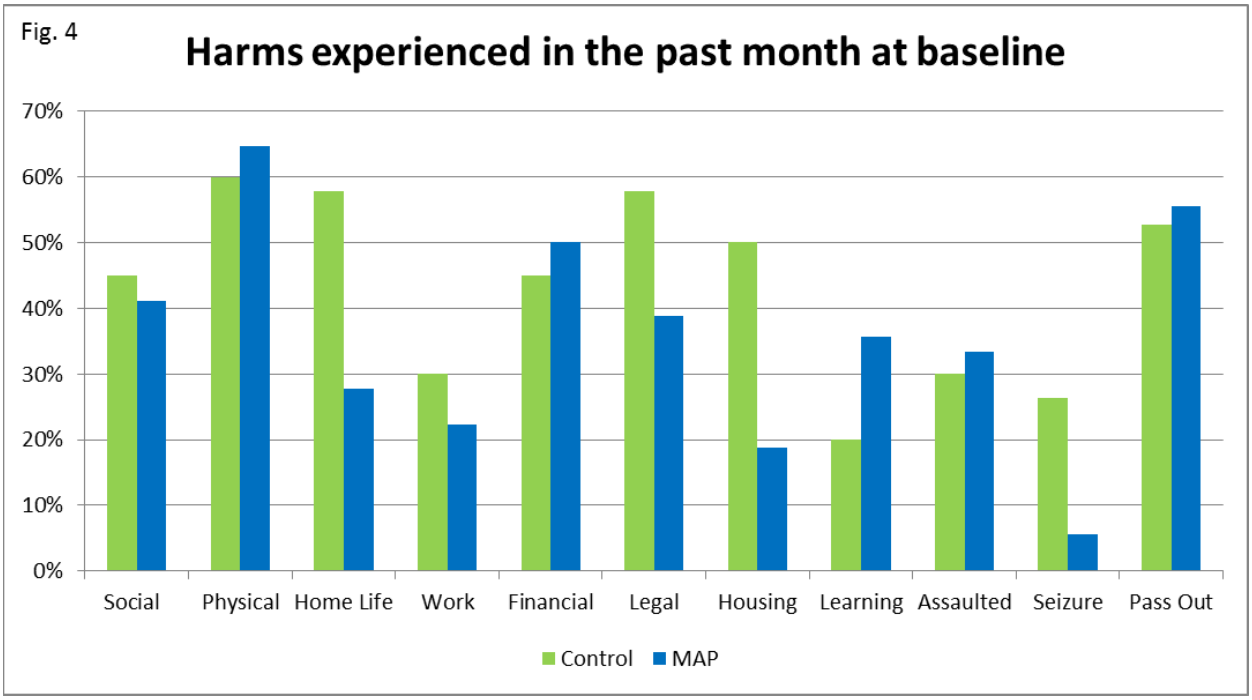
1004	Sept 5, 2013	76 weeks post	232	51	879
1005	June 16, 2011	67 weeks pre		15	
1005	June 6, 2013	36 weeks post	83	87	343
1006	July 30, 2013	36 weeks post	433	279	1097
1008	July 3, 2012	12 weeks post	12	12	
1008	May 1, 2013	55 weeks post	14	11	92
1010	June 6, 2013	63 weeks post	117	44	1531
1010	August 27, 2013	75 weeks post	77	42	
1011	March 28, 2013	33 weeks post	497	240	1109
1011	August 9, 2013	52 weeks post	121	69	
1012	October 9, 2012	1st week post	141	77	1639
1012	January 10, 2013	14 weeks post	46	36	
1012	June 11, 2013	36 weeks post	64	56	491
1013	July 30, 2013	28 weeks post	147	119	1002
1013	October 17, 2011	66 weeks pre	62	51	
1014	January 7, 2011	106 weeks pre		17	
1014	January 29, 2013	2 weeks post	17	12	60
1015	August 17, 2012	1st week post	49	61	173
1037	July 16, 2013	7 weeks pre		18	
1037	Sept 3, 2013	1st week post	13	10	35
Control participants					
1018	August 13, 2013	N/A		40	
1019	June 4, 2013	N/A	103	54	
1023	May 26, 2013	N/A	72	56	
1039	June 28, 2013	N/A	170	100	

4.5 Were there Reductions in Alcohol-Related Harms?

4.5.1 Overview

Fewer MAP participants than controls reported harms due to alcohol in the past month in the domains of home life, legal, housing, and withdrawal seizures (see Figure 4). It is important to note that the great majority of MAP participants would have been resident in the MAP before the baseline interview, hence this comparison may be indicative of long-term benefits from being resident in the MAP. During the monthly follow-up assessments, only rates of passing out and experiencing seizures were assessed. Only one MAP participant (out of 5) reported experiencing a withdrawal seizure during the 6-month follow-up period compared with 3 controls (out of 6). Both participants (3/5) and controls (4/6) reported passing out from drinking too much during the 4-6 months after start of the evaluation period.

Fig. 4



4.6 Was there Increased Access to Health Services?

4.6.1 Overview

Both residents and staff reported in an increase in access to health care services for participants in MAP primarily because of the presence of the nurse practitioner at the program site and increased ability to attend medical appointments. MAP participants were less likely to access health care in the emergency department and were now addressing previously unaddressed health issues and concerns.

4.6.2 Qualitative Responses: Access to Health Services

In the qualitative interviews, resident and staff participants both reported that MAP residents had increased access to health care services as part of being in the MAP. Both indicated that residents now

had access to the nurse practitioner who provided health care to program participants. One staff stated,

> "She [Nurse Practitioner] also monitors the residents of the program, to see what kinds of health outcomes are resulting from their involvement, but then she can also do, you know, wound care, immunizations, prescribes lots of different kinds of medications, deal with chronic infections, help people with diabetes, and all kinds of stuff. It's great."

Residents were more likely to get health care from the nurse rather than the emergency department and being in the MAP also meant that they were more likely to take their medications than prior to the MAP program. Many of the participants indicated that they had health issues that prior to admission to the MAP that were not being addressed because they were not able to keep appointments or did not want to go to the hospital. MAP participants said that staff were helpful in assisting them with transportation and keeping medical appointments. One person talked about how they had been able to get a surgery that had been repeatedly put off because they were previously homeless:

> " Yeah, so – and I have another operation coming up. I'm not even sure when… So… they're really taking care of us here. Make sure we get to our appointments. Yeah, they're making sure we get to our appointments. I didn't really feel like going to the hospital when I was next door."

One participant indicated he was very happy because he had received a bus pass that allowed him to get his appointments. Participants indicated they were also getting help from staff with their income assistance applications and to budget money; assistance they also perceived as helpful.

4.7 Was there Reduced Contact with Police and Health Services?

4.7.1 Overview

Qualitative interview responses indicated MAP participants felt they had better relationships with the police than when they lived on the street. Analysis of health and police data indicated substantial reductions for MAP participants in rates of police contacts, hospital admissions and detoxification admissions mostly in the region of between 40% and 80%, both in comparison with rates when the same participants were not on the MAP and in comparison with controls. Despite individual variability and relatively small sample sizes, these comparisons were statistically significant for both hospital and detoxification admissions. There was also a significant reduction in police contacts that led to participants being held in police custody when they were on the MAP. There were also many fewer emergency room presentations for MAP participants compared with controls but this difference was not statistically significant.

4.7.2 Qualitative Responses

According to residents, participation in MAP has altered their circumstances such that they no longer need to partake in harmful activities such as sleeping in abandoned vehicles and stealing non-palatable alcohol like mouthwash. Residents credit their participation in MAP with reducing negative police contacts and time spent in jail. One resident recounts,

> "I used to go steal that mouthwash just to try and feel – get myself to feel better. I used to do that. I was in and out of jail. Ever since I've moved here, I haven't even had any police contact."

Staff also noted that police, regardless of their personal perceptions of the program, would bring residents back to Kwae Kii Win Centre instead of jail and the program provided an alternative to the streets, hospital and jail.

4.7.3 Were there Reductions in Police Contacts?

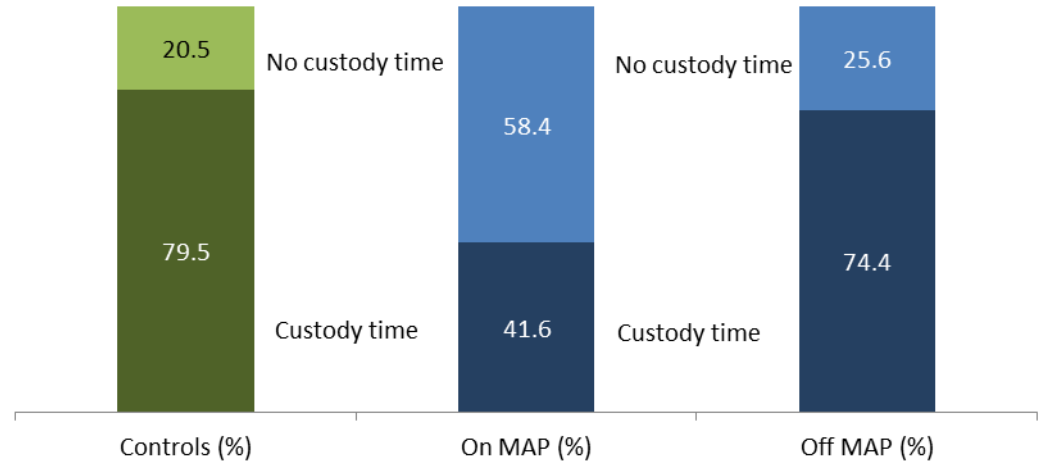
There were fewer recorded police contacts for MAP participants per 100 days on the program compared with the rate of contacts while off the program (see Table 3). The size of the reduction is quite large (42%) but with the relatively small number of participants the simple paired t-test did not find this to be a statistically significant reduction (t=-1.14, ns). There were also 43% fewer contacts per 100 days on the program for participants compared with the rate of police contacts for controls though again this was short of statistical significance (two sample t-test, t=-0.93, ns).

Table 3. Mean of the number of crimes per 100 days during periods off and on-MAP among and for controls, 2008-2013

Observation period/sample	N	Mean	Standard deviation	Min	Max
Off MAP	13	4.77	7.83	0.85	30.62
On MAP	13	2.79	2.32	0.29	7.60
Controls	10	4.86	7.60	0.56	25.56

There was however a highly significant 43% reduction in police contacts which led to MAP participants being held in custody with the rate falling by almost a half (X^2=43.83 and P<0.0001, see Figure 5). There was also a significant difference in the proportion of incidents involving time in custody for MAP participants compared with controls (X^2=72.18 and P<0.0001).

Fig. 5 **Police contacts for MAP participants on and off the MAP (n=13) and controls (n=12)**



4.7.4 Were there Reductions in Hospital Admissions?

There were significantly fewer hospital admissions recorded for MAP participants per 100 days on the program compared with their rate of contacts while off the program (paired t-test, t=-2.11, one-tailed p<0.05). The size of the reduction was 37% (see Table 4). There were also fewer admissions per 100 days on the program for participants compared with the rate of admissions for controls but this comparison was not significant (paired t-test, t=1.1, ns).

Table 4. Mean of the number of hospital admissions per 100 days during periods on and off the MAP and among controls, 2008-2013

Observation period/sample	N	Mean	Standard deviation	Min	Max
Off MAP	13	**0.38**	0.66	0.00	2.37
On MAP	13	**0.24***	0.22	0.00	0.60
Controls	10	0.42	0.57	0.00	1.76

*p<0.05 one-tailed

4.7.5 Were there Reductions in ER Presentation?

There was very little change in the rate of ER presentations per 100 days on the program for participants compared with this rate while they were off the program (paired t-test, t=-0.22, ns). The average rate of ER presentations was 47% lower for MAP participants than controls however individual variability and small sample size meant this difference fell short of statistical significance (two sample t-test, t=-0.80, ns).

Table 5. Mean of the number of ER presentations per 100 days during periods on or off the MAP and among controls, 2008-2013

Observation period/sample	N	Mean	Standard deviation	Min	Max
Off MAP	13	3.60	3.22	0.90	10.29
On MAP	13	3.82	2.84	0.29	9.42
Control	10	7.15	14.76	0.55	48.67

4.7.6 Were there Reductions in Detoxification Episodes?

There were significantly fewer (88%) detoxification episodes for MAP participants per 100 days on the program compared with the rate for these while they were off the program (paired t-test, t=-2.22 and p<0.025). There were also 77% fewer detoxification episodes for MAP participants per 100 days on the program for participants compared with this rate for controls (two sample t-test, t=-1.69 and p<0.1). This of course is not surprising given the nature program.

Table 6. Mean of the number of detoxifications per 100 days among clients on or off the MAP and among controls, Thunder Bay, 2008-2013

Observation period/sample	N	Mean	Standard deviation	Min	Max
Off MAP	13	**2.46**	5.04	0.00	18.90
On MAP	13	**0.30****	0.49	0.00	1.70
Controls	10	1.59	2.04	0.06	5.69

**p<0.025 one-tailed

4.8 Was there a Reduction in Frequency of Non-Beverage Alcohol Use?

4.8.1 Overview

The three most common types of non-beverage alcohol (NBA) consumed by both groups were mouthwash, hand sanitizer and hairspray. All participants and 16/19 controls reported some NBA use in the previous month. However, MAP participants reported significantly smaller quantities than the controls at the baseline assessment interview – a point at which the majority of participants would have been on the MAP for several months at least. This change in NBA use by MAP participants was confirmed variously by the qualitative interviews with staff and residents and also quantitative survey data collected at baseline and follow-up interviews. Consumption of NBA did continue for some participants, but at a lower level. In the qualitative responses the participants made a strong distinction

between the wine provided on the program and the "garbage" and "bad stuff" they had consumed outside.

4.8.2 Qualitative Interview Data

Residents noted that although they still have opportunities to access NBA, their consumption of these substances decreased substantially once they entered the MAP. Drinking wine provided by the program has supported their avoidance of NBA. The following quotes illustrate residents' reflections on their decreased use of NBA:

> "I'm not drinking ah, hairspray, mouth wash, hand sanitizer, ah, cologne, body spray or anything that contains alcohol. I haven't touched that stuff for a long time…when I first came into this program everything really changed and I'm happy about that."

> "I haven't even drank that other, the hairspray in such a long time, I don't even remember when, I think about seven months or something like that. And the other stuff, I refuse it now. You know I could still be drunk everyday if I wanted to, with the people I was on the street with. [But] since coming here I drink wine… I don't think about buying anything else, you know like the other garbage like antiseptic, hairspray, all the other stuff that you know that I used to consume when I was out there."

Residents were clearly more aware of the harmful effects of NBA. They refer to it as "garbage", "that bad stuff" and "that no good stuff." Residents made concerted efforts to avoid these substances. One resident recalled their reaction when encountering homeless friends intoxicated on mouthwash: "I feel sorry for them. Because you know when I smell that, that mouthwash smell, oh it makes my stomach like… turn." Residents stated that the program has helped them to shift their drinking behaviour away from more harmful substances because the wine they receive in the program helps them to avoid feeling sick while still controlling their cravings for alcohol. As one resident says, "I live with the winos that drink every hour and a half. I think it keeps me ah, like good I guess… I don't drink that other stuff."

Two staff members observed the critical nature of the harm reduction approach promoted in the program:

> "There are really only two goals of the program: to lessen the load on the community services, and to provide a better quality of life. That's it. And so if they still drink hand sanitizer, but their quality of life is better, because now they can go to bed and sleep it off in a safe place, it's still progress. It's still better than what it was before. What we're looking for is incremental success."

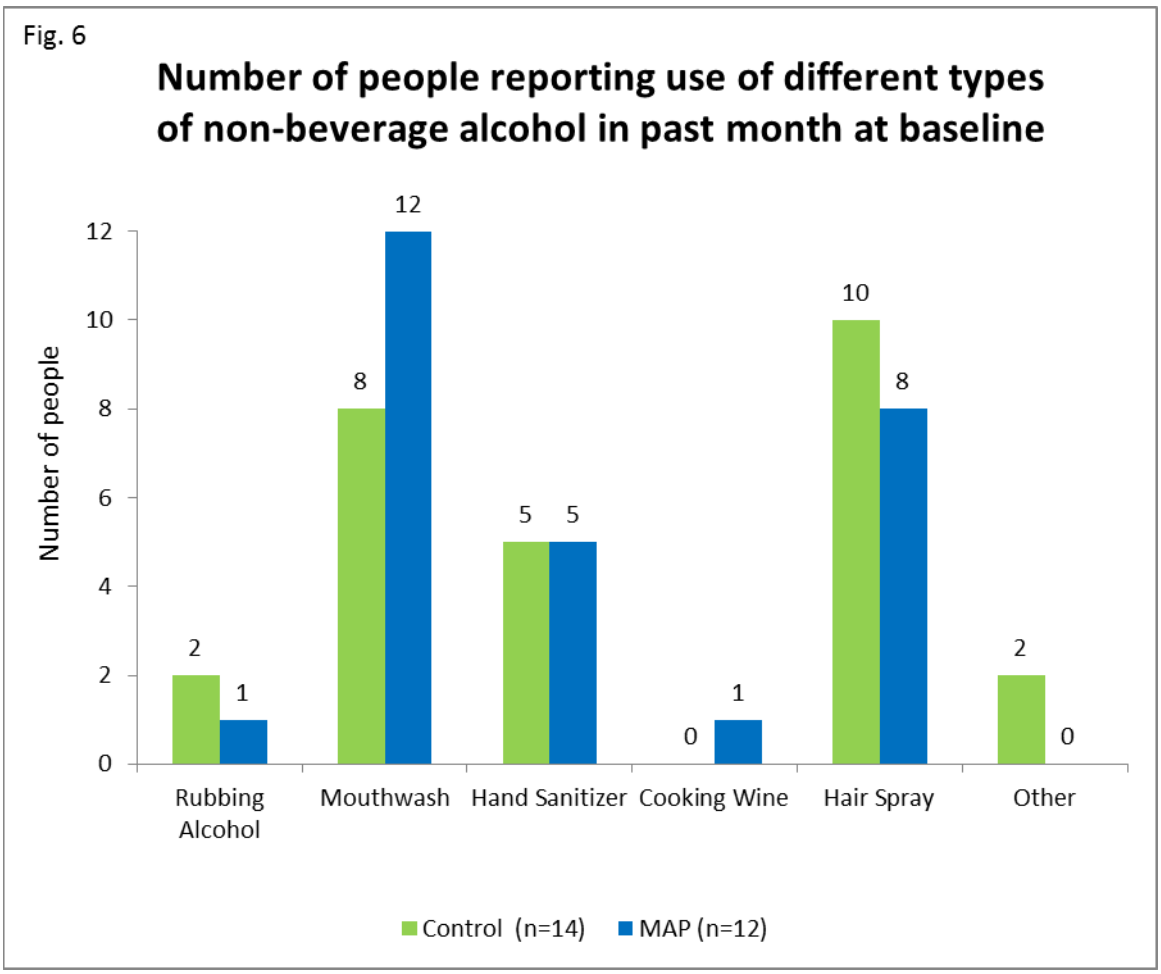
> "[In the MAP] there's a reminder that 'We prefer if you drink our alcohol.' Or, 'It isn't healthy to drink hand sanitizer.' So although we understand that's your choice, we try to call you back to drinking the wine. There's a constant reminder you're not in it alone. There's people that are saying, 'There's a better way.' And you're not kicked out ''cause you don't use the better way, but you're reminded that there's a better way."

Staff reported encouraging participants to drink on the MAP as a healthier choice and reinforced the value of staying on the program and drinking consistently on the program. When asked about drinking and drinking outside the program, many participants identified that drinking alcohol or non-beverage alcohol was a way to deal with pain, trauma, grief and loss in their lives. This speaks to the importance of trauma informed care and trauma specific services that may be beneficial to residents of the program.

4.8.3 Self-Reported Frequency of Non-Beverage Alcohol Use

Slightly fewer controls (16/19) than MAP participants (17/17) had consumed NBA at least once in the previous month. However, the controls also reported drinking NBA twice as often as the MAP participants (14.5 versus 7.2 days). All 12 of the MAP participants reported using mouthwash compared to 8 of the controls. Ten control participants and 8 MAP participants reported using hairspray and 5 of both MAP participants and controls reported use of hand sanitizer. Other types of non-beverage alcohol reported being used included rubbing alcohol and cooking wine (see Figure 6).

Fig. 6



4.10 Was there a Reduction in Alcohol Consumption while on the MAP?

4.10.1 Overview

Participants consumed on average 9 to 11 standard drinks per day, based on the records kept by MAP staff regarding drinks administered on the program and participants' self-reports of drinks consumed outside the program. The records indicated that this was a stable pattern during the 7 month course of the study for the complete group of MAP residents. However, among the smaller subsamples of participants (n=5) and controls (n=6) followed up for 6 months, drinking frequency in the past 30 days was markedly higher for MAP participants (28 days) than for controls (16 days) representing a slight increase for participants and a marked reduction for the controls. This would of course reflect compliance with the MAP for participants on the one hand and the less secure supply of alcohol and/or higher rate of incarceration among controls.

4.10.2 Qualitative Responses

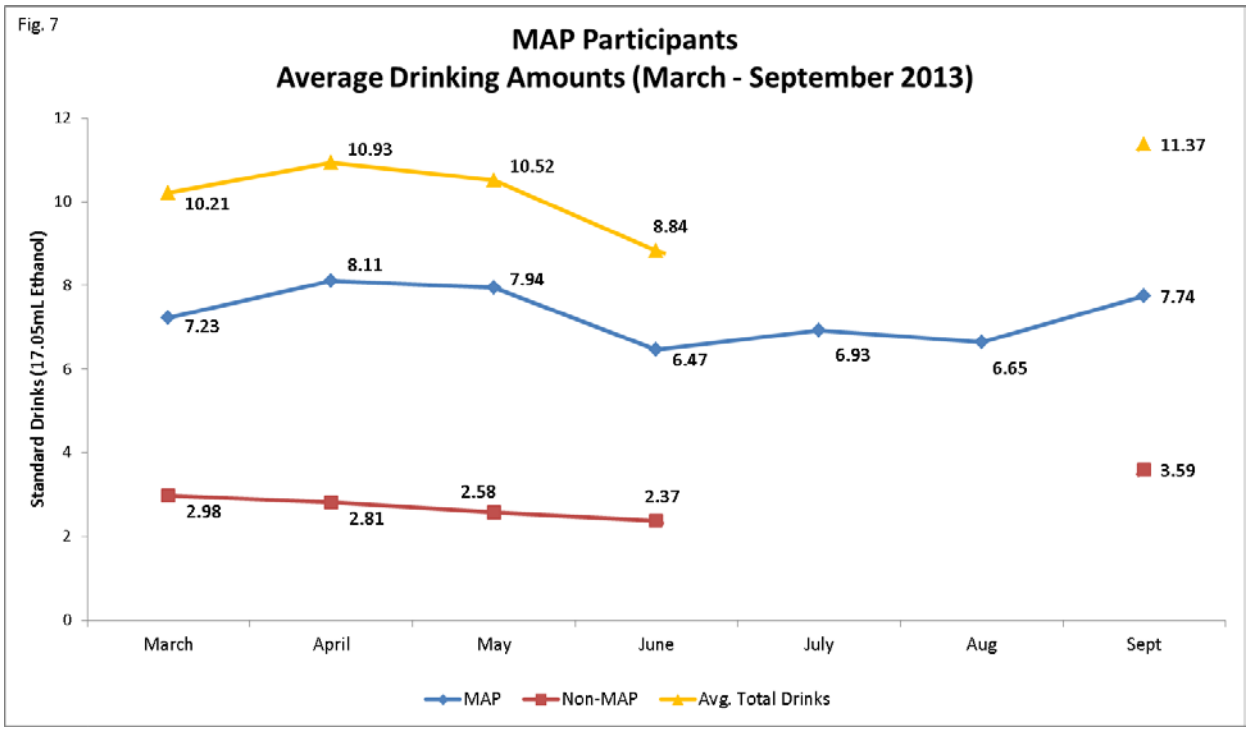
A few longer term residents reported that they tended to drink less on the MAP and also talked about hope for a future in which they could visualize a life where their addictions did not prevent them from finding employment and living in their own homes. Both staff and residents spoke to the issue of drinking off the program. Some participants indicated that people might drink off the program because they crave what they were used to drinking or because the wine being administered is not strong enough. For example,

> "Cravings maybe you know, feel like their body needs, you know, their body's so used to it that, that they want to go out and drink what their body's craving for. You know just like for me, I'll call… is almost like, it's like a necessity for my body you know. Just like, um, medication you know."

Participants, both staff and residents, indicated that they thought the program works best for people who stick to the protocol for alcohol administration. One staff person described that it didn't work very well for people who got their drink in the morning, left for the day and then returned at night for food and a bed.

4.10.3 MAP and Non-MAP Drinks Recorded Daily by Staff

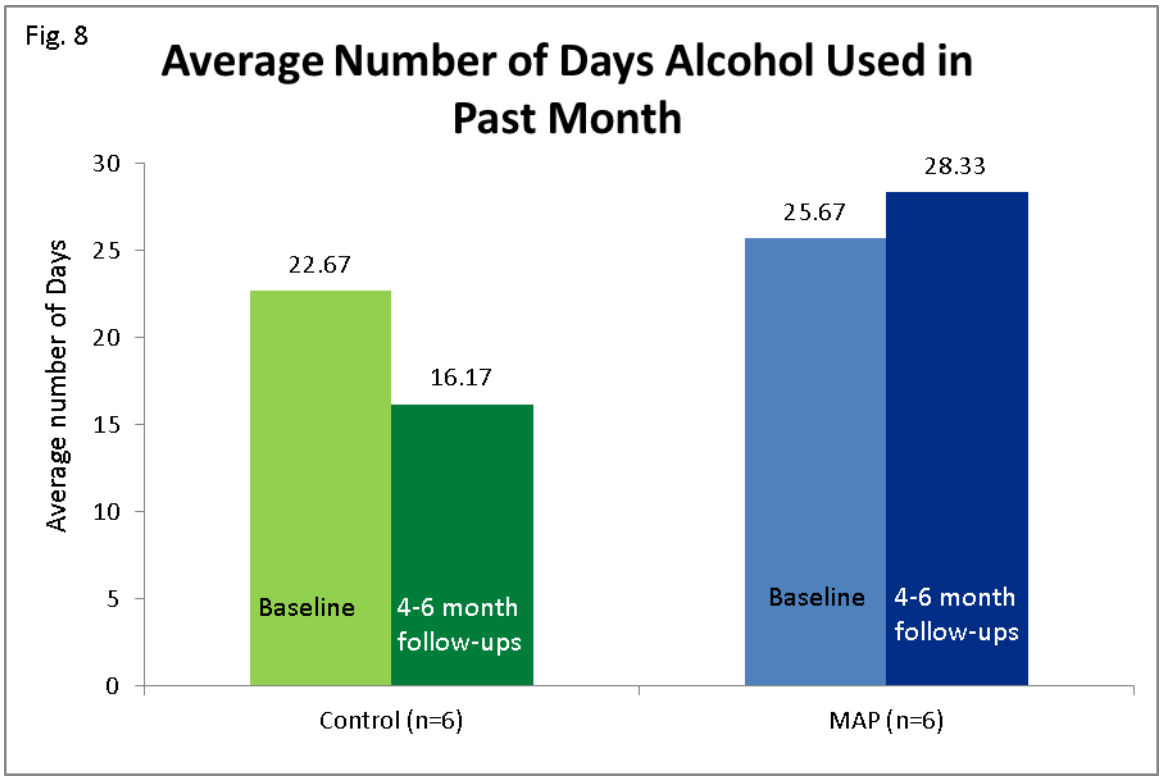
Figure 7 summarizes trends in the average number of drinks per day (MAP and non-MAP drinks) for all participants over monthly periods from the beginning of the MAP recorded by the Kwae Kii Win staff while administering the alcohol. It should be noted that this data source on non-MAP drinks can only apply to days that the participants attended the lounge to be administered drinks and who answered the questions about consumption outside of the program *on the previous day*. Figure 8 indicates a fairly steady level of consumption of alcohol on the MAP between 7 and 8 drinks per day along with approximately 3 to 4 standard drinks consumed outside the program - at least as was reported to the staff administering the alcohol. The total daily alcohol consumption per day was between 9 and 11 standard drinks over the course of the evaluation period.



4.10.4 Self-Reported Alcohol Consumption at Baseline and Follow-Up Period

Among the complete samples assessed at baseline, control subjects reported consuming more drinks per day in the previous month (n=31 drinks) than did MAP participants (n=19 drinks). However, among the newly admitted MAP participants followed up, the mean number of drinks consumed per day was higher in the period between 4 and 6 months follow-up (19.9 drinks, n=6) than for controls (12.6 drinks, n=6). In addition, days reported drinking in the previous month increased slightly from a mean of 25.67 to 28.33 days (n=6) for participants and reduced for controls from 22.67 to 16.17 days in past month (n=6) (see Figure 8).

Fig. 8



5.0 Discussion and Conclusions

The main purposes of the present evaluation were to establish whether entry into the MAP contributed (i) to significant improvements in the health and well-being of participants (ii) to significant reductions in the usage of emergency, hospital and police services (iii) to significantly less hazardous use of alcohol use, and (iv) to inform the development of program and policy recommendations for MAPs in the future. These objectives will be considered in turn.

Firstly, almost all indicators of health and wellbeing suggested beneficial effects of participation in the Kwae Kii Win MAP. The qualitative interviews offered striking evidence of the safety afforded by the program when contrasted to the harms of street life. Participants described feeling at home and with family. They described hope for the future and had in many cases reconnected with family members. It is significant that the great majority of participants retained their housing in stark contrast to the continuing homelessness of the control sample. Their ratings of the quality of their housing were significantly higher than the control sample's on all dimensions considered. While objective assessments of participants' and controls' mental and physical health indicated overall compromised health, controls scored lower on these dimensions. In the qualitative data, participants reported increased mental well-being as evidenced by increased reconnections with family, improved self-esteem and self-care as well as enhanced life skills in areas of communication and money management. Ratings of physical health declined slightly for both groups during the 6-month follow-up period. However, while objective tests of liver functioning indicated the majority of participants had alcoholic liver damage at some point before

or during the program, available results showed that in the great majority of cases functioning was actually improving for participants over time. This is in contrast to the findings of the Vancouver MAP (Stockwell et al, 2013a).

Secondly, there was evidence of striking reductions and improvements in the quality of contacts with police as well as reductions in admissions to both hospital and withdrawal management programs. Despite the small sample size and limited time period, these reductions were statistically significant. The level and extent of these reductions was typically between 40% and 80%. While we have not attempted to assess the economic cost savings of these reductions, they are likely to have been significant.

In terms of reductions in hazardous patterns of alcohol consumption, the indicators were mostly very positive for MAP participants. The fact that they retained their housing and were mostly consuming alcohol within the program as opposed to on the street and that the program drinks were spaced out through the day, as opposed to consumed quickly all at once is indicative both of a much safer patterns and contexts for drinking. It was also evident that the type of alcohol being consumed was intrinsically less hazardous; i.e. the wine provided on the program as opposed to a variety of forms of non-beverage and higher strength alcohol. While consumption of NBA did continue, it was at a lower level for participants than before participation in the program. While not a specific objective of the program, it also appeared the amount of alcohol administered to MAP participants plus off-program drinks reported to program staff was lower than the typical daily consumption they reported in the baseline interviews; albeit at baseline many participants had already been on the program for several weeks. The amount of alcohol consumed outside of the program may have been underestimated as participants may not have wanted staff to know about their outside drinking for fear of losing accommodation, so we cannot be confident that overall consumption did in fact decrease. According to staff records, total consumption on the program combined with that reported off the program held steady at approximately 9 to 11 standard drinks per day. In the follow-up research interviews with the sub-samples of participants and controls there were missing data at baseline, which made formal evaluation of any change in consumption impossible. It was, however, evident that frequency of drinking in terms of days in the past month was higher at follow-up for participants than controls with a substantial reduction in drinking frequency evident for the latter group. While we can be confident that pattern, context and type of alcohol consumed were less hazardous for the MAP participants, we cannot be certain that there was no increase in overall alcohol consumption as a result of their participation.

In relation to the final objective of recommendations for program and policy development, we have much praise to offer for the manner in which this difficult enterprise has been conducted. We note that some participants were not always happy with the restrictions imposed in terms of having to be on the premises for 90 minutes before dose administration and with searches of their room. However, in comparison with outcomes observed for some participants in the Vancouver MAP, with worsening liver functioning and increased consumption for some individuals, we see opposite trends with the Thunder Bay program. While there is increased daily frequency of drinking for participants compared with controls living on the street, the pattern and context of this use as well as, importantly, whether this was of non-beverage alcohol are all indicative of reduced harmfulness. It is also possible that overall

consumption may actually reduce once on the program given that there are some indications of improved liver functioning. Qualitative data also suggest consumption of alcohol may have reduced for MAP participants. Additionally, in qualitative reports, participants provide beginning clues for areas of program expansion such as cultural reconnections and resources to foster healing and recovery from trauma.

Against this overall pattern of improvement in formal indicators is the overarching achievement of creating a safe and stable environment for this profoundly vulnerable population. The self-reports of increased personal safety evident in both the quantitative and qualitative data are most striking. The stability provided by the program also enabled many participants to reconnect with family members and have greater feelings of self-worth and wellbeing. It may be that once participants stabilize in MAP, they are ready for and can be offered increased access to cultural connections and resources that foster recognition and healing of trauma. These represent potential areas for increased referrals and/or program expansion. It is also worth stressing that the apparently substantial reductions in hospital admissions, admission for detoxification and being taken into custody by police would have resulted in substantial economic savings for the local community.

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Appendix 1: Qualitative Questions for MAP Participants

1. How long have you been in the MAP?
2. Where did you live before you came to the MAP?
3. How would you describe the MAP to someone who did not know about such programs?
4. Tell me about how you came to be in the Managed Alcohol Program at [location]?
5. What changes, if any, have you seen in yourself since coming in the program? These may be positive or negative?
    a. Have you experienced a change in your housing? What difference has this made?
    b. Have you experienced a change in your income. How have you handled these?
    c. How has your drinking changed?
    d. Have you noticed any changes in your health (either physical, emotional or mental)?
    e. What about changes in your relationships with others either in the program or outside the program, family, friends?
6. What do you like about the program?
7. What do you not like?
    a. Any rules you don't like?
8. How safe and welcome do you feel in the program?
9. How does this compare to other programs (e.g. substance use programs detox, treatment). you have participated in?
10. Who do you think the program works best for? Who does it not work for?
11. How is the program helping you? What do you see as the benefits of the program for yourself? For others?
12. What are some reasons that you might drink outside the program? What are the reasons you think others might drink outside the program?
13. What needs do you have and how your needs different from other people in the program? How are the different needs of clients handled? E.g. differences in needs of men and women, cultural background, sexual orientation?
14. What do you think are some problems in the Managed Alcohol Program?
15. What should not be changed in the program?
16. What would you like to change about the program to improve it?
17. What would you tell others who are new to the program?
18. Anything else you would like to say about MAP?

Demographic Questions

19. Age: _____(years)
20. Gender:
21. Ethnicity:
22. What is the highest level of education you have completed? (check ONE box only)
    - ☐ No schooling
    - ☐ Some elementary schooling
    - ☐ Completed elementary school
    - ☐ Some high school

- ☐ Completed high school
- ☐ Some community college
- ☐ Some technical school
- ☐ Completed community college
- ☐ Completed technical school
- ☐ Some university
- ☐ Completed Bachelor's Degree
- ☐ Post graduate training: MA, MSc., MSW
- ☐ Post graduate training: PhD, "Doctorate"
- ☐ Professional degree (Law, Medicine, Dentistry)
- ☐ Don't know
- ☐ Refused

Appendix 2: Qualitative Questions for Program Staff

Participant's Background

1. What is your job title?
2. How long have you been in this job?
3. What kind of previous work experiences have you had?
4. What is your educational background?
5. What is your connection to [name of MAP]?

The MAP

6. Can you tell me a bit about the MAP?
   a. How would you describe the MAP to someone who does not know about the program?
   b. What would you say are the goals of the program?

7. Tell me about the duties of a staff person working in the MAP?
   a. What is your typical day like?
   b. What are you responsible for?
   c. What do you think would help prepare someone for working in a MAP?

8. What do you like about working in the MAP?
   What do you not like?

9. What are the issues or challenges of working in a MAP?
   a. with clients?
   b. Staff?

10. Now, I'd like to ask about alcohol administration. Tell me about a typical day.
    a. How often is alcohol served?
    b. What type of alcohol is served?
    c. How much alcohol is served at each dose?
       i. Is there a maximum number of doses?

d. What are the reasons someone might miss a dose of alcohol?
e. What are the reasons someone might be refused a dose of alcohol?
f. What is your approach to drinking outside of the program?

11. Has alcohol administration changed since the program started? If it is have changed, How has it changed? Why?

12. What kind of responses had you had to the program?
    a. What kind of response have you had from staff or others in your organization?
    b. What kind of response from MAP participants?
    c. What about
        i. police,
        ii other community members,
        iii. media or
        iii. other agencies?
        iv. If applicable, Aboriginal or other ethnic communities?

13. Who is the target group for the program?
    a. What is the eligibility criteria for the program?
    b. Does the program serve men?
    c. What about women?

14. Who do you think the program works best for?

15. Who does it not work well for?

16. In your opinion, what are the benefits of the program for
    a. MAP participants?
    b. Other shelter residents
    c. Staff
    d. Agency?
    e. Community?

17. In your opinion, what are the disadvantages of the program for:
    a. MAP participants?
    b. Other shelter residents
    c. Staff
    d. Community?

18. What advice would you give to others working in a MAP?
    a. What works well?
    b. What would you change?

19. Is there anything else you would like to share about working in the MAP from your experience?

Appendix 3: In-Depth and Monthly Follow-Up Surveys for MAP Participants and Controls

Centre for ADDICTIONS RESEARCH OF BC

CIHR Managed Alcohol Program Study Baseline

ID NUMBER: ☐☐☐☐☐☐

Interviewer: .....

Date: ..... / ..... / ..... (day / month / year)

Interview Site: .....

Cohort:

☐ MAP Participant

☐ Control Participant

A. Housing
(At Home survey)

A. 01 Please tell me the number of nights you have stayed in the following places in the past 30 days?

Location	Where did you stay last night? *(Check one ONLY)*	# of nights in the past 30 days *(Respond for all that apply)*	# of nights in the past 7 days *(Respond for all that apply)*
Outdoors/Street/Park			
Public Buildings (e.g. bus depot/train station)			
Abandoned building			
Car/van			
Camping			
Couch surfing (e.g. place in a house not normally used for sleeping such as a living room or kitchen			
Mobile Home or trailer			
Emergency Shelter (mixed genders)			
Emergency Shelter for Women			
Hotel/ Motel			
Transitional Housing (temporary accommodation for 3 months to 3 years)			
Hospital			
Prison			
Detox Program			
Treatment Program			
Market or Rental Unit			
Social or Public Housing (including supported housing)			
Purchased House (Home ownership)			

IF HOUSED 30 DAYS OR MORE, answer the following three questions (A.02 – A.04), otherwise go to A.05: *Note: Being "housed" only includes "Market or Rental Unit", "Social or Public Housing", or Purchased House".*

A.02 How long have you been in your current housing?

_____months

A.03 How many times have you moved in the past three years?

_____times

A.04 Have you been homeless in the past three years?

☐ Yes
☐ No (SKIP TO A.10)

A.05 In the PAST 12 MONTHS, how many times have you been homeless (including the present time if currently homeless)?

- ☐ 1 time
- ☐ 2 times
- ☐ 3 times
- ☐ 4 times
- ☐ 5 times
- ☐ 6 times
- ☐ More than 6 times

A.06 In the past 3 years, how many times have you been homeless (including the present time if currently homeless)?

- ☐ 1 time
- ☐ 2 times
- ☐ 3 times
- ☐ 4 times
- ☐ 5 times
- ☐ 6 times
- ☐ More than 6 times

A.07 How long is it since you have lived in a permanent housing situation?

- ☐ 7 days or less
- ☐ 8-30 days
- ☐ 2 months
- ☐ 3 months
- ☐ 4 months
- ☐ 5 months
- ☐ 6 months
- ☐ 7 months
- ☐ 8 months
- ☐ 9 months
- ☐ 10 months
- ☐ 11 months
- ☐ 12 months
- ☐ 1-2 years
- ☐ 2-3 years
- ☐ More then 3 years

A.08 What do you think is keeping you from getting permanent housing?
(check ALL that apply)

- ☐ Can't afford rent
- ☐ No job / no income
- ☐ No money for moving costs (eg. Damage deposit, first months rent)
- ☐ No transportation
- ☐ Bad credit
- ☐ Eviction record
- ☐ Criminal record
- ☐ Don't want housing
- ☐ Alcohol / drug use
- ☐ Other (specify): _____

A.09 How long have you been living in this area?

- ☐ 7 days or less
- ☐ 8-30 days
- ☐ 1-3 months
- ☐ 4-6 months
- ☐ 7-11 months
- ☐ 1-2 years
- ☐ 3-5 years
- ☐ 6-10 years
- ☐ More than 10 years

Choice

I would like you to answer each statement I read about the place you're staying in, using one of the following answers: very dissatisfied, dissatisfied, neither satisfied nor dissatisfied, satisfied, very satisfied.

How do you feel about:

A.10 How long you will be able to stay in your current place?

- ☐ Very dissatisfied
- ☐ Dissatisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Satisfied
- ☐ Very satisfied
- ☐ Don't know
- ☐ Declined

A.11 How affordable your place is?

- ☐ Very dissatisfied
- ☐ Dissatisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Satisfied
- ☐ Very satisfied
- ☐ Don't know
- ☐ Declined

Quality

Now some questions about the quality of where you currently stay. This time the answers are: very bad, somewhat bad, neither good nor bad, somewhat good, very good.

A.12 How would you rate your current place for safety?

- ☐ Very bad
- ☐ Somewhat bad
- ☐ Neither
- ☐ Somewhat good
- ☐ Very good
- ☐ Don't know
- ☐ Declined

A.13 How about spaciousness (that is, feeling like you have enough space to stay comfortably)?

- ☐ Very bad
- ☐ Somewhat bad
- ☐ Neither
- ☐ Somewhat good
- ☐ Very good
- ☐ Don't know
- ☐ Declined

A.14 How about privacy? By privacy, we mean feeling like you will not be disturbed by other people.

- ☐ Very bad
- ☐ Somewhat bad
- ☐ Neither
- ☐ Somewhat good
- ☐ Very good
- ☐ Don't know
- ☐ Declined

A.15 How about friendliness? That is, feeling like you are in a pleasant and welcoming place.

- ☐ Very bad
- ☐ Somewhat bad
- ☐ Neither
- ☐ Somewhat good
- ☐ Very good
- ☐ Don't know
- ☐ Declined

A.16 And how would you rate your current place for overall quality?

- ☐ Very bad
- ☐ Somewhat bad
- ☐ Neither
- ☐ Somewhat good
- ☐ Very good
- ☐ Don't know
- ☐ Declined

A.17 ***MAP PARTICIPANTS ONLY:***
If you left the Managed Alcohol Program, would you be able to keep your housing/shelter?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

B. Alcohol Use (CASSIDU)

Interviewer Reference: Definition of a DRINK

Note: A "drink" is equal to a 12 oz can or bottle of beer, mixed drink or cooler (~340 ml), OR a 5 oz glass of wine (~120 ml), OR a 1½ oz shot of liquor (~40ml).

1L mouthwash (26.9% alc) = 15.8 drinks
500ml rubbing alcohol (95% alc) = 27.9 drinks

B.01.01 What age were you when you first drank alcohol?

Enter age in years _____

B.01.02 In the PAST 30 DAYS, on about how many of these days did you drink alcoholic beverages?

Enter number of days _____
☐ Don't know
☐ Refused

If answer is 0, SKIP TO B.02.01

B.01.03 In the PAST 30 DAYS, on those days when you drank, how much did you usually have? (*please record the type and quantity of drink, eg. 2x 6oz wine, ½ a bottle of 750mL Sherry)*

_____

☐ Don't know (SKIP TO B.01.04)
☐ Refused (SKIP TO B.01.04)

B.01.03.a *Interviewer:* Convert to Standard Drinks:

_____ std drinks

B.01.04 In the PAST 30 DAYS, how often did you have **5** or more drinks containing alcohol in one session?

Enter number of days _____
☐ Don't know
☐ Refused

B.01.05 In the PAST 30 DAYS, what kind of alcoholic drink did you drink the most of? (*check ONE box only*)

☐ Beer
☐ Hard liquor/spirits
☐ Fortified wine (Port, Sherry or vermouth)
☐ Table wine
☐ Cooler
☐ Rubbing Alcohol
☐ Mouthwash
☐ Hairspray
☐ Other (specify) _____
☐ Don't know (SKIP TO B.01.09)
☐ Refused (SKIP TO B.01.09)

B.01.06 Thinking about the kind of alcoholic drink you had most of in the past 30 days, what BRAND of drink was that usually?

Name: _____
☐ Don't know
☐ Refused

B.01.07 Thinking about the kind of alcoholic drink you had most of in the past 30 days, where did you usually get it from? (*check ONE box only*)

☐ *Managed Alcohol Program (MAP)*
☐ Liquor store
☐ Beer store
☐ Bar, club or restaurant
☐ Friend or acquaintance
☐ U-Vint or U-Brew store
☐ Homebrew
☐ Other (specify) _____
☐ Don't know
☐ Refused

B.01.08 Thinking about the kind of alcoholic drink you had most of in the past 30 days, how much did you usually pay for it?

Note: Regular beer or cooler bottle/can=0.33 L; regular wine or spirit bottle=0.7L

$ _____ per _____ (quantity in L or mL)
OR if no payment, how did you usually obtain it?
☐ Gift
☐ Exchange not involving money
☐ Don't know
☐ Refused

B.02 PROBLEMS RELATED TO DRINKING (WHO AUDIT)

B.02.01 How often during the PAST 12 MONTHS have you found that you were not able to stop drinking once you had started?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily
- ☐ Don't know
- ☐ Refused

B.02.02 How often during the PAST 12 MONTHS have you failed to do what was normally expected from you because of drinking?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily
- ☐ Don't know
- ☐ Refused

B.02.03 How often during the PAST 12 MONTHS have you needed a first ALCOHOLIC drink in the morning to get yourself going after a heavy drinking session?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily
- ☐ Don't know
- ☐ Refused

B.02.04 How often during the PAST 12 MONTHS have you had a feeling of guilt or remorse after drinking?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily
- ☐ Don't know
- ☐ Refused

B.02.05 How often during the PAST 12 MONTHS have you been unable to remember what happened the night before because you had been drinking?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily
- ☐ Don't know
- ☐ Refused

B.02.06 Have you or someone else EVER been injured as a result of your drinking? *(If YES, ask if it was in the PAST 12 MONTHS?)*

- ☐ No, never
- ☐ Yes, but not in the PAST 12 MONTHS
- ☐ Yes, during the PAST 12 MONTHS
- ☐ Don't know
- ☐ Refused

B.02.07 Has a relative, a friend, a doctor or other health worker EVER been concerned about your drinking or suggested you cut down? *(If YES, ask if it was in the PAST 12 MONTHS?)*

- ☐ No, never
- ☐ Yes, but not in the PAST 12 MONTHS
- ☐ Yes, during the PAST 12 MONTHS
- ☐ Don't know
- ☐ Refused

B.03 HARMS RELATED TO DRINKING

B.03.01 Was there ever a time that you felt your alcohol use had a harmful effect on your friendships or social life? *(Check only the most recent time frame)*

- ☐ No, never
- ☐ Yes, but not in the PAST 12 MONTHS
- ☐ Yes, during the PAST 12 MONTHS
- ☐ Yes, during the PAST 30 DAYS
- ☐ Don't know
- ☐ Refused

B.03.02 What about on your physical health? Was there ever a time that you felt your alcohol use had a harmful effect on your physical health? *(Check only the most recent time frame)*

- ☐ No, never
- ☐ Yes, but not in the PAST 12 MONTHS
- ☐ Yes, during the PAST 12 MONTHS
- ☐ Yes, during the PAST 30 DAYS
- ☐ Don't know
- ☐ Refused

B.03.03 What about on your home life or marriage? Was there ever a time that you felt your alcohol use had a harmful effect on your home life or marriage (or relationship) *(Check only the most recent time frame)*

- ☐ No, never
- ☐ Yes, but not in the PAST 12 MONTHS
- ☐ Yes, during the PAST 12 MONTHS
- ☐ Yes, during the PAST 30 DAYS
- ☐ Don't know
- ☐ Refused

B.03.04 What about on your work, studies, or employment opportunities? Was there ever a time that you felt your alcohol use had a harmful effect on your work, studies, or employment opportunities?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.05 During the PAST 12 MONTHS, how many days, if any, were you away from work or school because of your drinking?

Enter number of days _____
☐ Don't know
☐ Refused
☐ N/A

B.03.06 What about on your financial position? Was there ever a time that you felt your alcohol use had a harmful effect on your financial position?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.07 What about legal problems? Was there ever a time when you had legal problems because of your alcohol use (e.g. contact with police/courts)?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.08 What about housing problems? Was there ever a time when you had housing problems because of your alcohol use?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.09 What about difficulty learning things? Was there ever a time when you had difficulty learning things because of your alcohol use?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.10 Have you been hit or physically assaulted by someone who had been drinking?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.11 Was there ever a time you experienced a seizure, convolution or fit because of your drinking or the after effects of drinking?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.12 IF YES in the past 30 days, how many times during the PAST 30 DAYS have you had a seizure, convolution or fit because of drinking or the after effects of drinking?

Enter number of times _____

B.03.13 Was there ever a time you passed out/lost consciousness because of your drinking?
(Check only the most recent time frame)

☐ No, never
☐ Yes, but not in the PAST 12 MONTHS
☐ Yes, during the PAST 12 MONTHS
☐ Yes, during the PAST 30 DAYS
☐ Don't know
☐ Refused

B.03.14 IF YES in the past 30 days, how many times during the PAST 30 DAYS have you passed out/lost consciousness because of your drinking?

Enter number of times _____

B.04 Severity of Alcohol Dependence Questionnaire (SADQ)

DURING THE PAST **SIX MONTHS:**

B.04.01 The day after drinking alcohol, I woke up feeling sweaty.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.02 The day after drinking alcohol, my hands shook first thing in the morning.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.03 The day after drinking alcohol, my whole body shook violently first thing in the morning if I didn't have a drink.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.04 The day after drinking alcohol, I woke up absolutely drenched in sweat.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.05 The day after drinking alcohol, I dreaded waking up in the morning.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.06 The day after drinking alcohol, I was frightened of meeting people first thing in the morning.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.07 The day after drinking alcohol, I felt at the edge of despair when I awoke.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.08 The day after drinking alcohol, I felt very frightened when I awoke.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.09 The day after drinking alcohol, I liked to have an alcoholic drink in the morning

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.10 The day after drinking alcohol, in the morning I always gulped my first few alcoholic drinks down as quickly as possible.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.11 The day after drinking alcohol, I drank more alcohol in the morning to get rid of the shakes.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

B.04.12 The day after drinking alcohol, I had a very strong craving for an alcoholic drink when I awoke.

- ☐ Never or Almost Never
- ☐ Sometimes
- ☐ Often
- ☐ Nearly Always

DURING THE PAST SIX MONTHS:

B.04.13 I drank more than a quarter of a 750mL (26oz) bottle of spirits in a day (OR 1 bottle of table wine OR half a bottle of sherry or fortified wine OR 5 regular bottles or cans of beer)

☐ Never or Almost Never
☐ Sometimes
☐ Often
☐ Nearly Always

B.04.14 I drank more than half a bottle of 750 mL (26oz) spirits in a day (OR 2 bottles of table wine OR 1 bottle of sherry or fortified wine OR 9 regular bottles or cans of beer)

☐ Never or Almost Never
☐ Sometimes
☐ Often
☐ Nearly Always

B.04.15 I drank more than one bottle of 750 mL (26oz) spirits in a day (OR 4 bottles of table wine OR 2 bottles of sherry or fortified wine OR 18 regular bottles or cans of beer)

☐ Never or Almost Never
☐ Sometimes
☐ Often
☐ Nearly Always

B.04.16 I drank more than two bottles of 750mL (26oz) spirits in a day (OR 8 bottles of table wine OR 4 bottles of sherry or fortified wine OR 36 regular bottles or cans of beer)

☐ Never or Almost Never
☐ Sometimes
☐ Often
☐ Nearly Always

IMAGINE THE FOLLOWING SITUATION:

(1) You have HARDLY DRUNK ANY ALCOHOL FOR A FEW WEEKS

(2) You then drink VERY HEAVILY for TWO DAYS

How would you feel the morning after those two days of heavy drinking?

B.04.17 I would start to sweat.

☐ Not at all
☐ Slightly
☐ Moderately
☐ Quite a lot

B.04.18 My hands would shake.

☐ Not at all
☐ Slightly
☐ Moderately
☐ Quite a lot

B.04.19 My body would shake.

☐ Not at all
☐ Slightly
☐ Moderately
☐ Quite a lot

B.04.20 I would be craving for a drink.

☐ Not at all
☐ Slightly
☐ Moderately
☐ Quite a lot

C. Non-Beverage Alcohol Use

C.01 Can you please tell me about the most recent time you wanted a drink really badly, but did not have the money to do so?

_____

_____

_____

_____

C.02 Have you ever done any of the following when you did not have enough money to buy alcohol in the **LAST 12 MONTHS**: *Ask how often this has occurred over the **PAST 12 MONTHS.** *Check the appropriate box for each item.*

What they did	**Never**	**Occasionally:** No more than once a month (1-12 times in past year)	**Sometimes:** No more than once a week (13-52 times in past year)	**Often:** At least once a week (53-250 times in past year)	**Always:** Almost everyday (>250 times in past year)	**Don't know**	**Refused**
Go without alcohol							
Get help/treatment for alcohol use							
Make existing supply last longer							
Wait for money *(i.e. welfare check)*							
Re-budget money for alcohol *(i.e. spend less money on groceries for alcohol)*							
Drink non-beverage alcohol *(Listerine, rubbing alcohol etc.)*							
Use illicit drugs							
Steal from liquor store							
Steal other people's alcohol							
Other property theft							
Other *(specify)* _____							

C.03 In the **PAST 12 MONTHS**, have you drank non-beverage alcohol? **That is, alcohol that is not intended for drinking, like Listerine, hand sanitizer, cooking wine, or rubbing alcohol.**

☐ Yes
☐ No (SKIP TO SECTION D)
☐ Don't know (SKIP TO SECTION D)
☐ Refused (SKIP TO SECTION D)

C.04 What types of non-beverage alcohol did you drink in the **LAST 12 MONTHS?** *Ask how often this has occurred over the **PAST 12 MONTHS.** *Check the appropriate box for each item.*

What they did	**Never**	**Occasionally:** No more than once a month	**Sometimes:** No more than once a	**Often:** At least once a week	**Always:** Almost everyday	**Don't know**	**Refused**
Rubbing alcohol							
Mouthwash							
Hand sanitizer							
Cooking wine							
Vanilla Extract							
Hair spray							
Other *(specify)*_____							

C.05 In the last 30 days, how many days did you use non-beverage alcohol?

Enter number of days _____
☐ Don't know (SKIP TO SECTION D)
☐ Refused (SKIP TO SECTION D)

If answer is more than 0 then continue, otherwise SKIP TO SECTION D.

C.06 In the last 30 days, what types of non-beverage alcohol did you consume?

Type	Number of days item was used in the PAST 30 DAYS	How much did you usually drink on the days when you drank this? (Size of bottle x number per day)
Rubbing alcohol	.....DAYS	
Mouthwash	.....DAYS	
Hand sanitizer	.....DAYS	
Cooking wine	.....DAYS	
Vanilla Extract	.....DAYS	
Hair spray	.....DAYS	
Other *(specify)*	.....DAYS	

D. Your Drug Use History

D.01 Please indicate what your experience is with each of the following drugs:

Y = Yes **N** = No **DK** = Don't Know	**Have you EVER used or tried…** CIRCLE ONE	**In the PAST 12 MONTHS, have you used...** CIRCLE ONE	**Number of days drug was used in the PAST 30 DAYS** WRITE (0 – 30)
Tobacco	Y N DK	Y N DK	……..Days
Marijuana	Y N DK	Y N DK	……..Days
Cocaine (powder)	Y N DK	Y N DK	……..Days
Crack (Rock)	Y N DK	Y N DK	……..Days
Amphetamine (Speed)	Y N DK	Y N DK	……..Days
Crystal Meth	Y N DK	Y N DK	……..Days
Heroin	Y N DK	Y N DK	……..Days
Ecstasy (incl. MDMA/MDA/MDEA)	Y N DK	Y N DK	……..Days
"Speedballs" (Cocaine & Heroin)	Y N DK	Y N DK	……..Days
Methadone**	Y N DK	Y N DK	……..Days
Dilaudid **	Y N DK	Y N DK	……..Days
Morphine / MS Contin	Y N DK	Y N DK	……..Days
Oxycodone / Percocet	Y N DK	Y N DK	……..Days
Codeine / T3's / T4's	Y N DK	Y N DK	……..Days
Benzo's ** (eg. Valium, Ativan)	Y N DK	Y N DK	……..Days
_____	Y N DK	Y N DK	……..Days

*** Interviewer: It does not matter whether or not the person had a prescription for the drug.*

F. WHOQOL - BREF

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last two weeks**.

		Very poor	Poor	Neither poor nor good	Good	Very good
F.01	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
F.02	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about **how much** you have experienced certain things in the last two week.

		Not at all	A little	A moderate amount	Very much	An extreme amount
F.03	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
F.04	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
F.05	How much do you enjoy life?	1	2	3	4	5
F.06	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
F.07	How well are you able to concentrate?	1	2	3	4	5
F.08	How safe do you feel in your daily life?	1	2	3	4	5
F.09	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

		Not at all	A little	Moderately	Mostly	Completely
F.10	Do you have enough energy for everyday life?	1	2	3	4	5
F.11	Are you able to accept your bodily appearance?	1	2	3	4	5
F.12	Have you enough money to meet your needs?	1	2	3	4	5
F/13	How available to you is the information you need in your day-to-day life?	1	2	3	4	5
F.14	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither poor nor good	Good	Very good
F.15	How well are you able to get around?	1	2	3	4	5

The following questions ask you to say how **good or satisfied** you have felt about various aspects of your life over the last two weeks.

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
F.16	How satisfied are you with your sleep?	1	2	3	4	5
F.17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
F.18	How satisfied are you with your capacity for work?	1	2	3	4	5
F.19	How satisfied are you with yourself?	1	2	3	4	5
F.20	How satisfied are you with your personal relationships?	1	2	3	4	5
F.21	How satisfied are you with your sex life?	1	2	3	4	5
F.22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
F.23	How satisfied are you with the conditions of your living place?	1	2	3	4	5
F.24	How satisfied are you with your access to health services?	1	2	3	4	5
F.25	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Seldom	Quite often	Very often	Always
F.26	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

G. Colorado Symptom Index (Mental Health)

G.01 In the past month, how often have you felt nervous, worried, or frustrated?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.02 In the past month, how often have you felt depressed?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.03 In the past month, how often have you felt lonely?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.04 In the past month, how often have others told you that you acted "paranoid" or "suspicious"?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.05 In the past month, how often did you hear voices, or hear or see things that other people didn't think were there?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.06 In the past month, how often did you have trouble making up your mind, or deciding about something?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.07 In the past month, how often did you have trouble thinking straight, concentrating, or remembering?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.08 In the past month, how often did you feel that your behaviour or actions were strange or different from that of other people?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.09 In the past month, how often did you feel out of place or like you did not fit in?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.10 In the past month, how often did you forget important things?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.11 In the past month, how often did you have problems with thinking too fast (thoughts racing)?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.12 In the past month, how often did you feel suspicious or paranoid?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.13 In the past month, how often did you feel like hurting or killing yourself?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

G.14 In the past month, how often have you felt like seriously hurting someone else?

- ☐ Not at all
- ☐ Once during the month
- ☐ Several times during the month
- ☐ Several times a week
- ☐ At least every day
- ☐ Don't know
- ☐ Declined

H. ACCESS TO CARE

H.01 Do you have a regular place to go for medical care? (eg. nurse practitioner, family doctor)

- ☐ Yes
- ☐ No
- ☐ Don't Know (SKIP TO H.03)
- ☐ Declined (SKIP TO H.03)

H.01.a If **NO**, Why do you not have a regular place to go for medical care?
Do not read list; record all that apply.

- ☐ None available in the area
- ☐ Have had a negative experience(s) with doctors in the past
- ☐ They are not taking new patients
- ☐ Have not tried to contact one
- ☐ Had a medical doctor who left or retired
- ☐ Seldom or never get sick
- ☐ Recently moved into the area
- ☐ Likes to go to different places for different health needs
- ☐ Have moved around a lot (within the area)
- ☐ Don't know where to go for care
- ☐ Don't use doctors/ treat myself
- ☐ Don't have a health card
- ☐ Don't have a telephone number
- ☐ Too busy finding food, shelter, or other necessities
- ☐ Have no transportation
- ☐ The wait for an appointment is too long
- ☐ Clinic hours are inconvenient
- ☐ Usual source of health care in the area is no longer available
- ☐ Don't know
- ☐ Declined
- ☐ Other (specify): _____

H.02 If **YES**, What kind of place is it?
(*check ONE box only*)

- ☐ Doctor's office
- ☐ Nurse practitioner
- ☐ Community health center
- ☐ Walk-in clinic (where you need to show ID)
- ☐ Health clinic (requiring an appointment)
- ☐ Telephone health line
- ☐ Hospital emergency room
- ☐ Outpatient clinic
- ☐ Health clinic at a shelter, hostel, drop in, bus, nursing clinic
- ☐ Aboriginal health center
- ☐ Alternative health center (e.g. naturopath, Chinese medicine clinic)
- ☐ Don't know
- ☐ Declined
- ☐ Other (specify): _____

H.03 In the past 6 months, was there ever a time when you felt that you needed health care but you didn't receive it?

- ☐ Yes
- ☐ No (SKIP TO H.04)
- ☐ Don't Know (SKIP TO H.04)
- ☐ Declined (SKIP TO H.04)

H.03.a Thinking of the most recent time, why didn't you get care?

- ☐ Negative past experience, treated poorly or with disrespect by HC provider
- ☐ Health care too far away
- ☐ Not available – at time required (eg. nurse not around, doctor on holidays, inconvenient hours)
- ☐ The wait for an appt. was too long
- ☐ Felt would be inadequate
- ☐ Cost
- ☐ Didn't get around to it/didn't bother
- ☐ Didn't know where to go
- ☐ Had no transportation
- ☐ Language barriers
- ☐ Personal or family responsibilities
- ☐ Dislikes/mistrusts doctors/afraid
- ☐ Decided not to seek care
- ☐ Doctor – didn't think it was necessary
- ☐ Didn't have a health card
- ☐ Didn't have a phone number
- ☐ Was too busy finding food, shelter, or other necessities
- ☐ Too busy for other reasons
- ☐ Couldn't get time off work
- ☐ Looking for work
- ☐ Couldn't get child care
- ☐ Was too depressed/not up for going
- ☐ Was refused services
- ☐ Don't have a family doctor
- ☐ Addiction Issues
- ☐ Don't know
- ☐ Declined
- ☐ Other (specify): _____

H.04 In the past 30 days, have any of the following happened to you?

You attended a hospital emergency department	Y	N
You were admitted to a hospital	Y	N
You spent time in jail	Y	N
You were charged with an offence by the police	Y	N

H.05 Have you ever tried to stop drinking alcohol completely?

☐ Yes
☐ No (SKIP TO H.06)
☐ Don't Know (SKIP TO H.06)
☐ Declined (SKIP TO H.06)

H.05.a If YES, did you do this:
(check ALL that apply)

☐ With advice and support from your GP
☐ With advice and support from another health profession or counselor
☐ Through attending Alcoholics Anonymous
☐ After being admitted to hospital for detoxification
☐ After being admitted to an inpatient alcohol treatment unit
☐ Entirely on your own without outside support
☐ Other (specify) _____

H.06 In the PAST 12 MONTHS, what do you think is the longest time you succeeded in staying away from alcohol?

_____months / _____weeks

H.07 In the PAST 12 MONTHS, roughly how many times did you try to give up alcohol?

_____times

H.08 Roughly how many times have you EVER been in alcohol detox?

_____times → What about in the PAST 12 MONTHS? _____times

H.09 Roughly how many times have you EVER been in alcohol treatment?

_____times → What about in the PAST 12 MONTHS? _____times

I. Demographics

I.01 What is your age? ☐☐ years

I.02 What is your gender?

☐ Female
☐ Male
☐ Transgender
☐ Intersex

I.03 If you are comfortable disclosing, how do you describe your sexual orientation?

☐ Heterosexual/Straight
☐ Homosexual/Gay or Lesbian
☐ Bisexual
☐ Unsure/Questioning
☐ Prefer not to disclose

I.04 Were you born in Canada?

☐ Yes
☐ No (SKIP TO I.05)

If YES, in which province or territory were you born?

☐ British Columbia
☐ Alberta
☐ Saskatchewan
☐ Manitoba
☐ Ontario
☐ Québec
☐ New Brunswick
☐ Nova Scotia
☐ Prince Edward Island
☐ Newfoundland & Labrador
☐ Yukon
☐ Northwest Territories
☐ Nunavut

(SKIP TO I.07)

I.05 Which country were you born in?

_____

I.06 What year did you come to Canada?

I arrived in ☐☐☐☐

I.07 What ethnic group or family background do you identify yourself as?
(*check ALL that apply*)

☐ White
☐ Chinese
☐ South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
☐ Black (e.g. African, Jamaican or Caribbean)
☐ Filipino
☐ Latin American
☐ Southeast Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese, etc.)
☐ Arab (e.g. Arabic speaking, Maghrebi)
☐ West Asian (e.g., Afghan, Iranian, Israeli, Turk, etc.)
☐ Japanese
☐ Korean
☐ Aboriginal (e.g. North American Indian, Metis, Inuit)
☐ Other (specify) _____
☐ Don't know
☐ Refused

I.08 .What is the language you feel most comfortable speaking?

☐ English
☐ French
☐ Other (specify) _____

I.09 What is the highest level of education you have completed?
(check ONE box only)

☐ No schooling
☐ Some elementary schooling
☐ Completed elementary school
☐ Some high school
☐ Completed high school
☐ Some community college
☐ Some technical school
☐ Completed community college
☐ Completed technical school
☐ Some university
☐ Completed Bachelor's Degree
☐ Post graduate training: MA, MSc., MSW
☐ Post graduate training: PhD, "Doctorate"
☐ Professional degree (Law, Medicine, Dentistry)
☐ Don't know
☐ Refused

I.10 What is your current marital status?
(check ONE box only)

☐ Married
☐ Living common-law (living with partner)
☐ Widowed
☐ Separated
☐ Divorced
☐ Single, never married
☐ Don't know
☐ Refused

I.11 Are you currently in any form of drug or alcohol treatment or support group (excluding MAP's)?
(e.g. methadone, 12-step, outpatient day program, individual counselor, etc.)

☐ Yes
☐ No
☐ Don't know
☐ Refused

I.11.a Have you ever been (or are currently) in a managed alcohol program?

☐ Yes
☐ No
☐ Don't know
☐ Refused

Income/Work (At Home survey)

I.12 What is your current PRIMARY employment status?

☐ Unemployed
☐ Employed (incl. self employed)
☐ Volunteer work, unpaid
☐ Employed in a special work program
☐ Retired
☐ Student
☐ Housewife/husband
☐ Other (Specify)
☐ Don't know
☐ Declined

I.12.a If other (specify):

_____

I.13 What are your current sources of income?
Read out list. Record all that apply. Use the Other category for consumer run-business income, family support, student loans etc.
Regular work is a fixed number of hours per week, casual is no fixed number of hours per week.

☐ Earnings from regular work
☐ Long-term Disability (Private Insurer)
☐ Earnings from casual work
☐ Personal Needs Allowance
☐ Unemployment insurance
☐ Selling papers, souvenirs, crafts
☐ Disability income
☐ Pan-handling
☐ Welfare/income assistance (PPMB status)
☐ Busking (entertaining for cash)
☐ Pension, incl. Old age security, CPP, veteran's pension
☐ Squeegeeing
☐ Collecting/recycling
☐ Other (specify)

I.13.a Other (specify):

_____

I.14 In the study, we recognize that there may be other sources of income that you may have used to survive on the street. Please know that your confidentiality is protected if you would like to tell me about these sources of income, but like the other questions you do not have to tell me about them.
Record what they tell you. Provide examples "such as sex work or selling or running drugs" if needed.

_____

_____

_____

I.15 How much spending money do you have in a week from all sources?
Enter as dollars, round up to the nearest dollar. If clarification is required, we are looking for gross income, before tax.

_____

I.16 Do you pay rent?

☐ Yes
☐ No (SKIP TO SECTION J)

I.17 If YES, how much do you pay per month?
(If you don't know the exact amount, please provide an estimate)

$_____

☐ Don't know

I.18 Is any portion of your rent paid directly by income assistance to your landlord?

☐ Yes
☐ No (SKIP TO I.20)

I.19 If YES, do you know how much?

$_____

☐ Don't know

I.20 Do you live in a subsidized housing unit?

☐ Yes (SKIP TO SECTION J)
☐ No
☐ Don't know

I.21 Do you receive a market rental subsidy?

☐ Yes
☐ No (SKIP TO SECTION J)
☐ Don't know (SKIP TO SECTION J)

I.22 If YES, what is the amount of your rental subsidy?

$_____

☐ Don't know

J. Comments (*MAP PARTICIPANTS ONLY*)

J.01 *What were your reasons or motivations for joining the Managed Alcohol Program?*

J.02 *What do you hope the benefits of being in the Managed Alcohol Program will be?*

J.03 *If you could design the Managed Alcohol Program, what would it look like?*

J.99 Please give us three ways that we can contact you in the next month.
Eg. Family member, friend, agency.

Name	Phone Number
1.	
2.	
3.	

J. Comments
(*CONTROL PARTICIPANTS ONLY*)

J.04 *Have you ever heard of or been in a managed alcohol program?*

J.05 *What is your opinion of such programs?*

J.06 *Why or why not would you choose to be in such a program?*

J.07 Anything else you would like to tell us?

J.99 Please give us three ways that we can contact you in the next month.
Eg. Family member, friend, agency.

Name	Phone Number
1.	
2.	
3.	

K. Interviewer Comments

K.01 INTERVIEWER Please rate the quality of this interview in terms of the interviewee's responses:

- ☐ High (cooperative and forthcoming)
- ☐ Medium (some reluctance to answer a few questions)
- ☐ Low (some answers may be unreliable)
- ☐ Very Low (many answers may be unreliable)

K.02 Interviewer's Comments:

Centre for ADDICTIONS RESEARCH OF BC

CIHR Managed Alcohol Program Study Monthly Check-in

ID NUMBER: ☐☐☐☐☐☐

Interviewer: .....

Date: ..... / ..... / ..... (day / month / year)

Interview Site: .....

Please specify which cohort this participant belongs in.

☐ Control group

☐ MAP group

Are you still on the MAP program? **YES** / **NO**

If no, reasons for leaving the program:

Interviewer Comments (Please note any unusual circumstances):

A. Housing
(At Home survey)

A. 01 Please tell me the number of nights you have stayed in the following places?

Location	Where did you stay last night? *(Check one ONLY)*	# of nights in the past 30 days *(Respond for all that apply)*	# of nights in the past 7 days *(Respond for all that apply)*
Outdoors/Street/Park			
Public Buildings (e.g. bus depot/train station)			
Abandoned building			
Car/van			
Camping			
Couch surfing (e.g. place in a house not normally used for sleeping such as a living room or kitchen			
Mobile Home or trailer			
Emergency Shelter (mixed genders)			
Emergency Shelter for Women			
Hotel/ Motel			
Transitional Housing (temporary accommodation for 3 months to 3 years)			
Hospital			
Prison			
Detox Program			
Treatment Program			
Market or Rental Unit			
Social or Public Housing (including supported housing)			
Purchased House (Home ownership)			

A.16 And how would you rate your current place for overall quality?

- ☐ Very bad
- ☐ Somewhat bad
- ☐ Neither
- ☐ Somewhat good
- ☐ Very good
- ☐ Don't know
- ☐ Declined

B. Alcohol Use (CASSIDU)

Interviewer Reference: Definition of a DRINK

Note: A "drink" is equal to a 12 oz can or bottle of beer, mixed drink or cooler (~340 ml), OR a 5 oz glass of wine (~120 ml), OR a 1½ oz shot of liquor (~40ml).

1L mouthwash (26.9% alc) = 15.8 drinks
500ml rubbing alcohol (95% alc) = 27.9 drinks

B.01.02 In the PAST 30 DAYS, on about how many of these days did you drink alcoholic beverages?

Enter number of days _____
☐ Don't know
☐ Refused

If answer is 0, SKIP TO B.02.01

B.01.03 In the PAST 30 DAYS, on those days when you drank, how much did you usually have? (*please record the type and quantity of drink, eg. 2x 6oz wine, ½ a bottle of 750mL Sherry)*

_____

☐ Don't know (SKIP TO B.01.04)
☐ Refused (SKIP TO B.01.04)

B.01.03.a *Interviewer:* Convert to Standard Drinks:

_____ std drinks

B.01.05 In the PAST 30 DAYS, what kind of alcoholic drink did you drink the most of? (*check ONE box only*)

☐ Beer
☐ Hard liquor/spirits
☐ Fortified wine (Port, Sherry or vermouth)
☐ Table wine
☐ Cooler
☐ Rubbing Alcohol
☐ Mouthwash
☐ Hairspray
☐ Other (specify) _____
☐ Don't know (SKIP TO B.01.09)
☐ Refused (SKIP TO B.01.09)

B.01.08 Thinking about the kind of alcoholic drink you had most of in the past 30 days, how much did you usually pay for it?

Note: Regular beer or cooler bottle/can=0.33 L; regular wine or spirit bottle=0.7L

$ _____ per _____ (quantity in L or mL)
OR if no payment, how did you usually obtain it?
☐ Gift
☐ Exchange not involving money
☐ Don't know
☐ Refused

B.03m HARMS RELATED TO DRINKING

B.03m.10 In the past 30 days, have you been hit or physically assaulted by someone who had been drinking?

☐ No
☐ Yes
☐ Don't know
☐ Refused

B.03m.11 In the past 30 days, have you experienced a seizure, convolution or fit because of your drinking or the after effects of drinking?

☐ No
☐ Yes
☐ Don't know
☐ Refused

B.03.12 IF YES in the past 30 days, how many times during the PAST 30 DAYS have you had a seizure, convolution or fit because of drinking or the after effects of drinking?

Enter number of times _____

B.03m.13 In the past 30 days, did you pass out/lose consciousness because of your drinking?

☐ No
☐ Yes
☐ Don't know
☐ Refused

B.03.14 IF YES in the past 30 days, how many times during the PAST 30 DAYS did you pass out/lose consciousness because of your drinking?

Enter number of times _____

C. Non-Beverage Alcohol Use

C.05 In the last 30 days, how many days did you use non-beverage alcohol?

Enter number of days _____
☐ Don't know (SKIP TO SECTION D)
☐ Refused (SKIP TO SECTION D)

If answer is more than 0 then continue, otherwise SKIP TO SECTION D.

C.06 In the last 30 days, what types of non-beverage alcohol did you consume?

Type	Number of days item was used in the PAST 30 DAYS	How much did you usually drink on the days when you drank this? (Size of bottle x number per day)
Rubbing alcohol	.....DAYS	
Mouthwash	.....DAYS	
Hand sanitizer	.....DAYS	
Cooking wine	.....DAYS	
Vanilla Extract	.....DAYS	
Hair spray	.....DAYS	
Other *(specify)*	.....DAYS	

D. Your Drug Use History

D.01 Please indicate what your experience is with each of the following drugs:

	Number of days drug was used in the PAST 30 DAYS WRITE (0 – 30)
Tobacco	……..Days
Marijuana	……..Days
Cocaine (powder)	……..Days
Crack (Rock)	……..Days
Amphetamine (Speed)	……..Days
Crystal Meth	……..Days
Heroin	……..Days
Ecstasy (incl. MDMA/MDA/MDEA)	……..Days

	Number of days drug was used in the PAST 30 DAYS WRITE (0 – 30)
"Speedballs" (Cocaine & Heroin)	……..Days
Methadone**	……..Days
Dilaudid **	……..Days
Morphine / MS Contin	……..Days
Oxycodone / Percocet	……..Days
Codeine / T3's / T4's	……..Days
Benzo's ** (eg. Valium, Ativan)	……..Days

*** Interviewer: It does not matter whether or not the person had a prescription for the drug.*

F. WHOQOL - BREF

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last two weeks**.

		Very poor	Poor	Neither poor nor good	Good	Very good
F.01	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
F.02	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

		Not at all	A little	Moderately	Mostly	Completely
F.10	Do you have enough energy for everyday life?	1	2	3	4	5
F.12	Have you enough money to meet your needs?	1	2	3	4	5

The following questions ask you to say how **good or satisfied** you have felt about various aspects of your life over the last two weeks.

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
F.17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
F.19	How satisfied are you with yourself?	1	2	3	4	5
F.20	How satisfied are you with your personal relationships?	1	2	3	4	5
F.23	How satisfied are you with the conditions of your living place?	1	2	3	4	5

H.04 In the past 30 days, have any of the following happened to you?

You attended a hospital emergency department	Y	N
You were admitted to a hospital	Y	N
You spend time in jail	Y	N
You were charged with an offence by the police	Y	N

J. Comments

J.99 **Interviewer**: Confirm that the three ways to contact the participant (given at baseline) are still up to date. Update as necessary.

Name	Phone Number
1.	
2.	
3.	