Oregon Addictions and Mental Health Division Substance Abuse Treatment Follow-Up Study

Final Report

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OREGON HEALTH AUTHORITY
ADDICTIONS AND MENTAL HEALTH DIVISION

Substance Abuse Treatment Follow-Up Study

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EXECUTIVE SUMMARY

Background & Purpose

The purpose of this study was to collect data on the long-term outcomes of publicly subsidized alcohol and drug treatment services in Oregon and present information gathered to vested stakeholders. Prior to this study, there had been little statewide data and information about what happens to publicly funded clients in Oregon during and after they leave treatment.

The Oregon Health Authority Addictions and Mental Health (AMH) Division designed a 12-month follow-up study to explore long-term outcomes for publicly funded treatment clients. AMH then contracted with NPC Research to conduct the study and partnered with 15 alcohol and drug treatment providers in Oregon to identify eligible clients to participate in the study. Long-term outcomes examined include long-term sobriety, employment, income, selected health, mental health and criminal justice outcomes, as well as client satisfaction measures.

Methods

Study participants were recruited by treatment providers in accordance with study eligibility requirements and protocol with the intention to represent a statewide sample of those receiving outpatient or residential services. Participation in the study was voluntary. Provider staff members were trained by NPC and AMH staff. Using a standardized survey instrument, interviews were conducted by staff at each treatment provider agency at treatment intake (baseline) and lasted about 1 hour. At 6 and 12 months post-intake, follow-up interviews were conducted by trained NPC interview staff and averaged about 20-25 minutes. Individuals were interviewed regardless of whether they were still in treatment or had been discharged from treatment.

Limitations

It would have been preferable to have had a separate control group of people similar to those in the study who were substance abusers – but did not access treatment – to help determine whether the changes from baseline to follow-up were exclusively due to the treatment intervention. However, it is important to note that study designs involving a control group are extremely costly and random assignment to treatment and control group for the duration of a longitudinal study is unlikely to be either an ethical—or workable—option.

As with any study, there is a likelihood of bias in the data, both from participants themselves under-reporting substance use and/or other socially undesirable behaviors, as well from missing data. These are the same limitations associated with most national studies of the subject. Regardless of limitations, however, these data constitute an important and unprecedented look at the impact of publicly funded treatment in Oregon.

Results

Data collectors successfully interviewed 432 out of 592 (73%) eligible clients for the 12-month interview. The 12-month follow-up rate per treatment provider agency ranged

from 60% to 88%. At 6 months, data collectors successfully interviewed 449 out of 606 (74%) eligible clients. The 6-month follow-up rate per treatment provider agency ranged from 50% to 100%.

SAMPLE CHARACTERISTICS

The average age of study participants in the 12-month sample was 36 years old, and 59% were male. Eighty-two percent identified as White, 12% Latino, 10% American Indian or Alaska Native (AI/AN), 6% Black or African American, and slightly less than 3% Asian and Hawaiian.[1] The median education was a high school diploma or GED.

Substance Use History

Alcohol was reported to be the primary substance for 54% of the sample at intake.[2] The next most common primary substances were amphetamine/methamphetamine (19%) and cannabis (14%). Fifty-nine percent reported being multi-substance users in their lifetime, while 20% had been multi-substance users in the 30 days prior to intake.[3] Nearly three-quarters of study participants had at least one prior alcohol or drug treatment episode.

Mental and Physical Health

Half the study sample reported having any lifetime treatment for mental health issues, with nearly one quarter of participants reporting mental health issues serious enough to require hospitalization. Nearly half (45%) reported having a chronic medical condition.

Criminal Justice Involvement

Sixty-nine percent of study participants said they had been incarcerated in the past. Fifty-six percent of the entire sample had at least one previous DUII.[4] More than two-thirds of 12-month interview responders were referred to treatment by a court, while 28% percent reported they were enrolled in some kind of treatment court (DUII, drug court, family dependency treatment court) at baseline.

TREATMENT INFORMATION

Of the study participants for whom both 12-month surveys and treatment disposition information is available:

- 64% successfully completed treatment.[5]
- 58% were reported to be abstinent at exit and another 22% had reduced use.
- Average length of stay in treatment was six months.
  - Participants averaged one individual treatment session per month.
  - Participants averaged three group sessions per month.

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[1] Participants were allowed to "check all that apply" in the category of race (which does not include Hispanic/Latino which is asked as a separate question); therefore these percentages add to more than 100%.
[2] This percentage refers to people who reported that their main substance of abuse/dependence was alcohol, despite the fact that they may have also reported being abstinent for weeks or months at intake.
[3] Multi-substance use does not include nicotine.
[4] DUII is the acronym for Driving Under the Influence of Intoxicants (liquor, controlled substance(s) or a combination of both).
[5] As determined by the treatment provider, successful completion means that the client has achieved at least two-thirds of his/her signed treatment plan and is no longer abusing and/or is abstinent 30 days prior to termination.

BASELINE TO 12-MONTH FOLLOW-UP OUTCOMES

Descriptive statistics

Study participants improved in almost every outcome category from baseline to the 12-month follow-up interview. The following list highlights some of these gains:

- There was an 18% increase in the number of participants reporting **abstinence from alcohol** use in the past 30 days (61% to 72%).[6,7]
    - Those who reported using alcohol at baseline saw a 63% increase in abstinence in the past 30 days (100% to 37%).
- There was a 76% increase in the proportion of participants reporting **abstinence from cannabis** use in the past 30 days (29% to 7%).
    - Those who reported using cannabis at baseline had an 85% increase in abstinence from cannabis in the past 30 days (100% to 15%).
- **The longest period of abstinence** from illicit substances in the past 30 days increased by six days, or 33% (18 days to 24 days).
- There were improvements in **mental health** status in the 30 days prior to the 12-month interview, especially for those who reported mental health issues in the past 30 days at baseline:
    - 67% decrease in depression for those reporting depression at baseline (100% to 33%);
    - 53% decrease in anxiety for those reporting anxiety at baseline (100% to 47%); and
    - Six-day decrease in days experiencing mental health issues for those reporting any mental health issues at baseline (19 days to 13 days) .[8]
- There was a 23% increase in the proportion of clients who strongly agreed that they have **friends who are clean and sober** (48% to 59%).
- Participants with full- or part-time **employment** increased by 29% (31% to 40%).[9]
- Median monthly **income** increased by 36% or $218.
- 80% to 90% of participants expressed **satisfaction with their treatment** experience over a range of measures at follow-up.

Findings from multivariate analysis of sobriety from alcohol and drug use[10]

- Alcohol use declined from baseline to 6 months and again from 6 months to 12 months, controlling for other factors.[11]

---

[6] Please note that percentage change is calculated by subtracting the earlier value from the later value and then dividing by the earlier value: (72% - 61%)/61% = 15% (increase). Some of the percentage change results may differ slightly from results calculated from rounded percentages in parentheses.
[7] Statistically speaking, there are too few cases to draw conclusions about drug use.
[8] Among study participants overall there were more modest declines. See report narrative for details.
[9] This is especially notable given the high unemployment rate in Oregon during the study period.
[10] These analyses included all participants for whom relevant data was available and controlled for age and gender (race was not a statistically significant factor and therefore left out of the analysis).
[11] In the multivariate analysis only alcohol use presented enough cases for the analysis. There were too few cases to draw conclusions about drug use.

- Different types of participants were more likely to report sobriety:
  - Those in treatment due to a DUII (driving under the influence) were only one-third as likely to report sobriety at 12 months as those not in treatment due to a DUII;
  - Those whose highest education level was a GED or high school diploma were only one-third as likely to report sobriety as those who had less than a GED/high school diploma;
  - Those who reported having sober friends both at baseline and 12 months were 2½ times more likely to maintain sobriety at 12 months than participants who did not report having sober friends; and
  - Those over 50 were over 3½ times more likely to report sobriety than individuals under 50.

Qualitative Interview Findings

What study participants liked best about their program:

When asked about what participants liked best about their treatment experience, several main themes emerged, including one-on-one sessions with counselors, relationships with their counselor and fellow treatment clients, the information about addiction and life skills provided, overall support provided by the program, as well as some of the other services provided such as mental health, housing placement, gender-specific treatment programming, and acupuncture.

What study participants would like to see changed in their program:

When asked about what participants would like to change about their treatment experience, participants expressed the desire for more one-on-one sessions, fewer people in group sessions, better educational materials, more respect for clients from the staff, more convenient groups times and locations, separating the DUII clients from clients with other substance abuse issues, better treatment agency management, lowered cost of services, a wider range of services, and more structure to the treatment programs.

> "My counselor had a similar background to mine… She knew what I was going through. She was like my mom. The treatment was very helpful… This was my first time getting clean from my drug of choice, methamphetamine, and I decided to give it a try. I continued doing it [staying clean] as a habit. I guess most of it stuck. Since I've been out, I haven't touched methamphetamine… I think about what I'm doing."
>
> ~Study Participant

OVERVIEW

Goals and Purpose of the Study

The Addictions and Mental Health Division (AMH) of the Oregon Health Authority designed a 12-month follow-up study to explore long-term outcomes for publicly funded treatment clients. AMH then contracted with NPC Research to conduct the study. Currently, there are limited data about what happens to publicly funded clients in Oregon after they leave treatment.

The purpose of this study was to collect data on the long-term outcomes of publicly subsidized alcohol and drug treatment services in Oregon. Ultimately, statewide (aggregate) results from this study will be provided to the Oregon State Legislature during upcoming sessions to aid policy makers in decision-making.

To conduct this study, NPC and AMH partnered with 15 alcohol and/or drug treatment providers in Oregon to identify recipients of publicly funded treatment services and invite them to participate in the study. Long-term outcomes examined include long-term sobriety, employment, income, selected health and mental health outcomes, as well as client satisfaction measures. The study represents the first-ever statewide effort to assess the longer term outcomes for publicly funded treatment clients.

Organization of this Report

This report has three main sections. The first, "Methods," is a detailed description of study methods, including provider and participant recruitment, instrumentation, interviewer training and follow-up protocols.

The second section, "Results," is the lengthiest and includes data tables for 12-month study participant demographics, lifetime alcohol/substance abuse information, mental and physical health issues, and views on treatment. In addition, data tables that compare baseline and 12-month outcomes for alcohol and drug use, mental health, physical health, employment, and social support network indicators. It also includes an overview of the qualitative information gathered from the 12-month interviews.

The next section, "Multivariate Outcomes Analysis," further explores the data through a series of statistical analyses to try to understand the relationship between demographic and individual characteristics and treatment outcomes.

The concluding section, "Conclusion and Recommendations," summarizes key findings and makes recommendations for program improvement.

"This program is the only one I have been successful with. My counselor made recovery something that was attainable and achievable. It is all because of my counselor. He let me be me when I first got there, until it clicked for me and then helped me through the rest of my recovery. I have great respect for my counselor as a mentor."

~Study Participant

METHODS

This section provides a description of the study recruitment procedures, survey instruments, study participant tracking methods, and data management procedures.

Study Recruitment

TREATMENT PROVIDER RECRUITMENT

Substance abuse treatment providers from around Oregon were invited to participate in the study in December 2009. AMH staff conducted an analysis of Oregon treatment providers and, on the basis of this, generated a short list of providers who would 1) be representative of treatment providers and clients statewide, and 2) collectively had enough average admissions per month to provide enough clients to the study. Of the original list of 23 providers,[12] 12 were recruited into the study. An additional three providers were recruited for a total of 15. AMH data showed that these 15 providers average intakes on 1190 clients per month.

NPC convened conference calls for providers to ask any questions treatment provider staff had about the study and their potential role in the study. Treatment agencies which agreed to partner with NPC Research and AMH were asked to complete the following tasks:

1. Recruit eligible clients between February and the end of April 2010. Recruitment involved introducing the study to all eligible clients that enrolled in a treatment program during the intake study window.
2. Review and complete the consent form with each participant.
3. Complete the locator form (part of the consent process) for each participant.
4. Designate staff to conduct data collection, attend a one-day training, and work with NPC throughout the project.
5. Administer the baseline interview to recruited clients no later than 2 weeks after intake.
6. Transmit interviews and consent forms to NPC via pre-paid Federal Express.
7. Work with NPC Research to make sure study intake paperwork was complete and sent each week during the baseline interview period.
8. Complete a discharge summary for each eligible participant.

[12] It should be noted that some of the treatment providers have different sites that are treated by the state addictions data system, the Client Processing and Monitoring System (CPMS), as separate providers. However, for the purposes of this study, the clients of the separate sites are still treated as belonging to a single provider.

The 15 treatment providers who agreed to participate in the study received training and on-going support for voluntary recruiting of individuals, obtaining and documenting informed consent, and administering the surveys. The provider collective recruited 592 eligible participants in the 3-month enrollment period. The following is a list of the participating treatment providers and their locations:

- ADAPT (Roseburg)
- Addictions Recovery (Medford)
- Bridgeway Recovery Services (Salem)
- Cascadia Behavioral Health (Portland)
- Central City Concern (Portland)
- Change Point (Portland & Beaverton)
- Choices Counseling Center (Grants Pass)
- CODA, Inc. (Portland)
- Columbia County Mental Health (St. Helens)
- De Paul Treatment Centers (Portland)
- Eastern Oregon Alcohol Foundation (Pendleton)
- Lifeworks, NW (Portland & Beaverton)
- OnTrack, Inc. (Medford)
- Pfeiffer & Associates (Bend)
- Yamhill County Chemical Dependency (McMinnville)

STUDY PARTICIPANT RECRUITMENT

Study participants were recruited by providers in accordance with study eligibility requirements and protocol. As is the case in all research of this type, per federal code on the treatment of human subjects, participation in the study was voluntary; clients did not have to participate if they did not want to. If they did agree, they were invited to participate in three interviews: at baseline, 6 months post-baseline, and 12 months post-baseline. Baseline interviews took about one hour, and participants received a $20 gift card in exchange for their time at the baseline interview.[13] The follow-up interviews averaged about 20-25 minutes each and participants received a $10 Fred Meyer (or Wal-Mart) gift card upon completion of each follow-up interview.

Participant Eligibility

Providers were trained to invite clients into the study based upon the following eligibility requirements:

1. If any part of a client's treatment services were paid for by publicly funded sources (e.g., publicly subsidized treatment clients) OR if they were a DUII[14] client;

[13] Originally there was not a budget to provide participants with incentives: however, it became clear that without incentives, it was unlikely that enough participants would be recruited for this study.
[14] DUII is the acronym for Driving Under the Influence of Intoxicants (liquor, controlled substance(s) or a combination of both).

2. If the client completed intake into services no more than 2 weeks prior to completing the baseline survey;
3. If the client completed the baseline survey during the enrollment period (2/1/2010-4/30/2010);
4. If the client had not received any drug or alcohol treatment (other than detoxification) within the past 30 days;
5. If the client was *not* being enrolled/transitioned into outpatient services directly after completing residential services;
6. If the client did not complete an intake with the *sole* purpose of obtaining an assessment;
7. If the client did not complete an intake for detoxification services only.

A total of 1,095 clients were invited into the study by the 15 treatment providers, which is about one third the number of clients estimated by AMH to enroll in any given 3-month window. Of these 1,095 clients, 612 clients agreed to participate, while 483 declined.[15] Of the 612 who agreed to participate, a total of 592 clients were eligible for the study.[16]

Survey Instruments

BASELINE SURVEY OVERVIEW

The baseline interviews (Appendix A) were conducted by staff from the respective treatment providers after client consent paperwork was complete. The baseline interview included questions from the Addictions Severity Index (Short Form), a common, well validated and highly regarded assessment instrument. It asks about client substance use (current and lifetime), employment, income, housing, mental health, medical, and other issues.[17] Additional questions from the Clinically Informed Outcomes Management (CIOM) survey[18] included measures related to recovery, social connectedness, symptoms, and functioning. Additional questions specific to AMH programs and internal questions on outcomes were also included.

[15] There were some strong differences between those who agreed to participate in the study at baseline and those who refused: more African Americans (58%) declined participation than other racial/ethnic groups, which had refusal rates of 44% (White), 39% (Latino) and 10% (AI/AN). Additionally, males refused to participate at a higher rate than females (47% vs. 41%), and those *not* involved in treatment courts (e.g., drug courts) tended to refuse at a higher rate (48% vs. 30%). Because of this, the sample cannot be seen as a representative sample from the participating providers and limits overall generalizability of the overall findings.

[16] Twenty of the clients who agreed to participate dropped out of treatment after the initial assessment without ever receiving treatment; this rendered them ineligible for the study.

[17] Because one of the providers uses the ASI as part of its intake process, they provided NPC with a copy of their data rather than duplicate many of the questions for the AMH intake interview. NPC provided this provider with a supplementary interview instrument to collect the additional survey items that are not included in the provider's usual intake assessment. Some of the questions were worded slightly differently. A data crosswalk is available from NPC upon request.

[18] For more information, see the CalMend Web page: http://www.calmend.org/CIOM.html

6-Month Interview Overview[19]

Information collected at 6 months mirrored the baseline survey (minus the lifetime behavioral health, criminal justice, etc. questions). Additional questions were added about client satisfaction with treatment services. The vast majority of the 6-month follow-up interviews (Appendix B) were conducted by trained NPC staff via telephone at a convenient time for each participant. A very small number (6%) of interviews were conducted in person, either at jail (for those incarcerated), at a location in the community (such as a coffee shop or treatment facility) or in participant homes when that was considered to be the only method to gain access to a participant.

12-Month Interview Overview

The 12-month survey (Appendix C) was very similar to the 6-month survey. Based upon issues that clients had with various 6-month questions, several questions were dropped at 12 months and the client satisfaction questions were rephrased. Twelve-month interviews were conducted by trained NPC staff primarily via telephone at a convenient time for each participant. A very small number (2%) of interviews were conducted in person at a location in the community (such as a coffee shop) or in participant homes when that was considered to be the only method to gain access to a participant.[20]

Discharge Summary Sheet

One final instrument was used to collect participant-level data: the discharge summary sheet (Appendix D). The discharge summary sheets gathered information about treatment dosage, exit date, exit status (i.e., successful completion, left without clinic agreement, moved away, etc.). Providers were asked to submit discharge summary sheets via fax or regular mail for each study participant they enrolled.

Timeline for the Follow-Up Interviews

The follow-up interview timeline mirrored the Substance Abuse and Mental Health Services Administration (SAMHSA) Government Performance and Results Act (GPRA) guidelines for client outcomes follow-up: study participants could be contacted as one month before their 6- or 12-month baseline survey anniversary and up to 2 months after their 6- or 12-month baseline survey anniversary. Due to the tight timeline for report delivery (draft on June 1st; final report on June 30th), 12-month interviews were conducted up through the beginning of May only. Data collectors made a vigorous effort to reach as many eligible study participants as possible by May 4, 2011. Ninety-eight percent of 12-month interviews were conducted on a rolling basis between 11 months and 14 months (334 days and 427 days) after study participant intake. Six participants were interviewed slightly early (between 298 and 331 days) and four participants were interviewed after 428 days (between 430 and 442 days).

Interviewer Training

A one-day training was held for treatment provider staff prior to client recruitment. This training was video-taped for those provider staff members unable to attend the training.

[19] Results from the 6-month survey can obtained from AMH upon request.
[20] No interviews, either by phone or in person, were conducted with incarcerated participants at 12 months. Please see explanation in the Limitations section.

For the 6- and 12-month follow-up interviews, NPC utilized up to eight trained interviewers at any one time, including one Spanish-speaking interviewer. NPC interviewers participated in a day-long training prior to the 3-month contact calls (to introduce NPC and update locator information) and 2-day trainings for both the 6- and 12-month interviews. Trainings provided information and standardized procedures (including scripts and forms) for protecting client confidentiality, tracking participants, engaging with study participants and locators over the phone (including text messages), email, and regular mail, as well as in-person and phone interviewing techniques, and post-interview tasks. Team meetings occurred weekly and were used to discuss any questions or issues that came up, brainstorm ways to contact hard-to-locate clients, and provide a congenial forum for interviewers to share strategies and stories.

CONFIDENTIALITY

Per NPC policy, AMH follow-up study project interviewers are required to keep all participant information confidential, take an online human subjects training, and sign a confidentiality agreement prior to beginning to contact study participants. The training further reinforced the importance of confidentiality and protocols for appropriately handling confidential data. NPC obtained IRB approval from the Portland State University Institutional Review Board (PSUIRB).

Mandatory Reporting

AMH data collectors were trained to keep information confidential in all but three circumstances: when an interviewer observed language or behavior that might be construed as 1) a medical emergency, 2) child or elder abuse, and/or 3) a threat of serious harm to self or others. Because interviewers conducted the vast majority of interviews over the phone, there was little chance to observe either medical emergencies, abuse, or harm to others. One such case was reported to the DHS hotline and Portland State University Institutional Review Board (PSUIRB), which oversees NPC's research protocols. In addition, several study participants reported having serious thoughts of suicide in the past 30 days and, of these, data collectors believed that half were currently having suicidal thoughts. NPC staff provided mental health crises resources over the phone to these clients and followed up by sending a list of resources in the client's county of residence. These cases were also reported to the PSUIRB and AMH.

ENGAGING WITH STUDY PARTICIPANTS AND LOCATORS

As part of the training, interviewers were instructed about the importance of being professional yet friendly, accessible, and responsive. The prime directive for data collectors is to make the interview experience as pleasant and meaningful as possible, both for its own merit and – in the case of the 6-month interview – to encourage participants to engage in the 12-month interview. NPC staff provided interested 12-month study participants with the web address of the 6-month progress report findings to let these important study partners know the results of their participation.

PARTICIPANT TRACKING

The key to successfully conducting 6- and 12-month follow-up interviews with study participants was to have up-to-date contact information for them. Staff at treatment facilities filled out locator forms that included the address and phone number(s) for study partici-

pants and the people/organizations they designated to be contacts in the event NPC staff was unable to contact the participant at follow-up. While some locator information was very complete, for others almost no useful information was provided. This made it extremely difficult for interviewers to contact some study participants in a timely way.

Tracking Strategies

Some of the more helpful strategies NPC staff employed involved creating a specialized contacts database where they recorded the date, time, and type of contact with each study participant or their designated locators. As updated contact information was obtained, it was recorded immediately in the database. Data collectors made phone calls, texted, sent emails and letters to participants, their locators, treatment agencies, and parole or probation (if a release was obtained). For a few participants, interviewers attempted to contact them or their locators a total of 70 times in order to obtain an interview!

In order to access as many study participants as possible, a toll-free number was set up, as was a cell phone with a 541 number to contact participants in the 541 area (after it was determined that some participants might assume a 503 number was from a bill collector or might be a marketing call).

Other strategies included searching for participants on the Victim's Information and Notification Everyday (VINE) Web site, an online resource for checking on the status of a criminal offender) and/or the Oregon Judicial Information Network (OJIN) Web site where there is information about anyone who has a civil, small claims, tax, domestic, and/or criminal case pending), and/or via social networking Web sites such as MySpace and public information resources such as MyLife.com and PeopleFinder.com.

Because many of the participants were homeless and did not have a phone number at treatment intake, data collectors made visits to several of the transitional housing complexes in Portland where these people were known to have lived to personally deliver letters about the 6- and 12-month interviews. In the final weeks of the study, interviewers also made visits to the homes of Portland Metro area participants. These were people who NPC staff was fairly certain were living in their homes, but simply not responding to efforts to contact them.

NPC also sent out birthday cards and thank you cards to participants in order to keep the study on their minds and associate NPC staff with friendliness. More than one study participant said that they really appreciated this. One participant even said that the birthday card NPC sent was the only birthday card she received this year.

POST-INTERVIEW TASKS

Once the phone interview was completed, NPC interviewers mailed the $10 gift card, a thank you card, and a resource sheet tailored to the specific county each client lived in.

Preparing the data for analysis

Because providers were responsible for data collection at intake, there were three intake databases to clean and merge: 1) scannable survey forms used by providers and sent to NPC; 2) a dataset from one of the treatment providers (which uses the ASI at intake), and; 3) a handful of surveys which were photocopied by providers from the training materials and unable to be scanned. The provider dataset used different field names and val-

ues from the ASI; therefore much work was involved in preparing that dataset in order to merge it with all the other data.

Preparing the final dataset involved one last level of complexity: obtaining discharge summary sheets from the providers for each study participant and then matching these data (identified by provider case number) back to each record at NPC. Providers were asked to submit discharge summary sheets via confidential fax or regular mail for each study participant they enrolled. Of the 606 eligible study participants at 6 months, 14 more were determined to be assessment only (i.e., dropped out of treatment before they had received any treatment sessions) from information contained in their discharge summaries. These 14 clients had to be dropped from the study – even those who had completed all three surveys, leaving 592 eligible participants.

In all, some or all discharge summary information was submitted on 447 of the eligible clients.[21] Of these 447 discharge summaries, 360 were for participants who were interviewed at 12 months, while another 87 discharge summaries were for eligible participants with no 12 month survey.[22,23]

> "They should make breathalyzers on your car mandatory for all DUIIs and for at least a year. Additionally, they should make you go to a victim's panel to get your driver's license back. Going to the victim's panel was really moving."
>
> ~Study Participant

[21] Despite repeated requests to providers for discharge information, NPC did not receive discharge summaries for 145 of the eligible clients.

[22] An additional 18 participants with 12 month interviews were still in treatment from the same treatment episode which began the previous year and led to their eligibility for this study. Therefore, there is treatment disposition data for 86% of the 12 month participants.

[23] Interestingly, 80 of the 12-month clients were not found in a download of CPMS data (Oregon data system that should contain records for all publicly funded A&D treatment clients) that included clients from the 15 participating providers who entered treatment from January 2011 through April 30 (slightly earlier than the study enrollment window). In consultation with AMH staff, a decision was made to include these clients in the study because treatment providers are key study partners that had been trained in the eligibility criteria and, as such, should be trusted to know whether clients were eligible. Two possible reasons that the 80 clients were not in CPMS download are 1) that they were flagged for having out-of-range data (and temporarily pulled from the system) or 2) provider staff had not yet entered the data into the system.

> "They need to have more counselors, smaller group sizes, and more one-on-ones. There were only two counselors for 65 women. There were usually 40-55 people per group for the entire nine months I was there. I only saw the counselor about once every 2.5 months for one-on-ones for 15 minutes if that. I think that's why… [I] wasn't successful."
>
> ~Study Participant

RESULTS

This section of the report includes a description of study participant characteristics and the results from the 12-month interviews.

Data collectors successfully interviewed 432 out of 592 (73%) eligible clients at the 12-month interview. At 6 months, data collectors successfully interviewed 449 out of 606 (74%) eligible clients. The 6-month follow-up rate per treatment provider agency ranged from 50% to 100%. NPC was notified that 6 study participants died between intake and the 12-month interview, while 24 more (4%) total refused to be interviewed from baseline to 12-months. The most common reason cited for refusal was lack of time and interest. Data collectors were more successful locating the participants who entered treatment at some provider agencies than others. The 12-month follow-up rate per provider ranged from 60% to 88% for eligible clients.

> "They helped me get into transitional housing after treatment. This was amazing because I was homeless before treatment. Now I am in school and doing well."
>
> ~Study Participant

In general, this 12-month sample was similar the overall sample of eligible participants. A refusal analysis comparing all 592 eligible clients and the 432 who completed a 12-month interview showed that there were no significant differences in race/ethnicity, number of prior treatments for substance abuse or mental health issues, or prior number of incarcerations.[24] However, there *were* significant differences in for gender, education, and mean income: participants who were female, who had higher incomes, higher educational levels, and/or were in treatment for a DUII[25] were more likely to have completed a 12-month interview. Participants who reported more substance use at baseline (more years of lifetime alcohol and drug use and more days of substance use in the past 30 days) were less likely to have a 12-month interview. Furthermore, there was a slight trend for those whose primary substance was alcohol or cannabis to be more likely to complete the 12-month survey than those who reported that their primary drug was heroin, cocaine, methadone, and prescription drugs. Amphetamine users were equally likely to have completed a 12-month interview. Please note that there were very few people who reported using heroin, cocaine, methadone, or prescription drugs – either at baseline or 12 months.[26]

Baseline Characteristics of 12-Month Sample

The average age of study participants in the 12-month sample was 36 years old and 59% were male. Eighty-two percent identified as White, 12% Latino, 10% American Indian or Alaska Native (AI/AN), 6% Black or African American, and 3% Asian and Hawaiian. More than half (54%) said that they had never been married, almost a quarter were divorced, and only about 12% reported that they were currently married. One-fifth (21%) of the 12-month sample did not have a high school diploma or GED, while the highest educational level for a third of study participants was high school or a GED. Another

[24] See footnote 15 for details.
[25] DUII is the acronym for Driving Under the Influence of Intoxicants (liquor, a controlled substance(s) or a combination of both).
[26] Because of the small numbers, statistical significance could not be reliably calculated.

third had an associate's degree or some college, while 4% reported completing a four-year college degree.

Table 1 provides detailed information on these basic demographic characteristics of the 12-month sample as reported at baseline. Further demographic information comparing participants at baseline and 12-months follow-up can be found later in this report.

Table 1. Demographic Characteristics of 12-Month Responders at Baseline

Characteristic	Percentage of respondents (unless otherwise noted)
Average age	36 years (N=432)
Male	59% (N=432)
Race/ethnicity[27]	
• Hispanic or Latino	12% (N=429)
• American Indian or Alaskan Native	10% (N=430)
• Black or African American	6% (N=430)
• Asian or Hawaiian	3% (N=430)
• White	82% (N=430)
Marital status[28]	(N=431)
• Never Married	54%
• Divorced	23%
• Married	12%
• Separated	9%
Children	
• Have children of any age……and for those with children: ○ Ever had children removed from care due to A&D	• 66% (N=431) ○ 23% (N=281)
Education[29]	(N=432)
• Less than high school, no GED	21%
• High school diploma or passed GED	33%
• Any vocational or trade school	12%
• Two-year Associate degree	5%
• Some college (no degree)	26%
• Four-year college degree (Bachelor's degree) or higher	4%
Homeless	10% (N=407)

[27] Participants were allowed to "check all that apply" in the category of race (which does not include Hispanic/Latino); therefore these percentages add to more than 100%.
[28] Marital status does not include the category "widow/widower."
[29] Education percentages do not add exactly to 100% due to rounding.

Nearly three-quarters of the respondents had at least one prior alcohol or drug treatment episode. Alcohol was the primary substance for over half (54%) the 12 month respondents, and the next most common primary substance was amphetamine or methamphetamine at 19%.[30] For most respondents (81%), the treatment episode that led to eligibility for this study was outpatient treatment, while the remaining 19% were enrolled in residential treatment. Table 2 shows key behavioral health measures for the 12-month sample of respondents.

> "It helped a lot to talk in group about my problems, and get feedback. We could relate to each other about what we were going through. The counselor was really good too."
>
> ~Study Participant

There were some intravenous injection drug users; 11 (65%) of the 17 heroin users, 33 (54%) of 61 amphetamine/methamphetamine users, seven (29%) of the 24 cocaine/crack users, and four (18%) of the 22 other opiates users reported intravenous use.[31] In addition to the drugs listed in Table 2, a very small percentage of participants reported that their main substance of choice was inhalants, non-prescribed methadone, prescription drugs, and other sedatives or tranquilizers.

This population has been involved with the criminal justice system, as evidenced by the fact that at baseline 69% of participants reported having been incarcerated in the past.[32] Fifty-six percent of the entire sample had at least one previous DUII, while 44% of the entire sample was receiving treatment for a DUII in the current episode. More than two-thirds of 12-month interview responders were referred to treatment by a court, while 28% percent reported they were enrolled in some kind of treatment court at baseline.

Table 2. Behavioral Health Indicators for 12-Month Responders at Baseline

Behavioral health item description	Percentage of Respondents (unless otherwise noted)
Average # of years alcohol and illicit drug use for those who reported using	3 years[33] (N=386)
Past alcohol or drug treatment	73% (N=420)
Average # of past alcohol treatment episodes	2 episodes (N=380)
Average # of past drug treatment episodes	2 episodes (N=390)

[30] This percentage refers to people who reported that their main substance of abuse/dependence was alcohol or methamphetamine/amphetamines despite the fact that they may have also reported being abstinent for weeks or months at intake.

[31] The baseline route of administration information was missing for over between 47 and 68 participants, depending on the illicit substance.

[32] There were 40 cases missing past incarceration information; therefore, it is difficult to know whether these clients were not asked the question at baseline or the question was skipped because they had not been incarcerated before.

[33] This is the average of all years that each person used all substances; for example, if someone used cannabis for 20 years, alcohol for 30 years and heroin for five years, their average number of years of use would be 18.3 years. As might be imagined, there was wide variation on this.

Behavioral health item description	Percentage of Respondents (unless otherwise noted)
Lifetime DTs – alcohol withdrawal for those with any DTs[34]	13 DTs (N=72)
Lifetime drug overdoses for those with any drug overdoses	5 (N=69)
Primary substance of dependence/abuse (whether or not used in past 30 days)	(N=404)
• Alcohol	54%
• Amphetamines/Methamphetamine	19%
• Cannabis[35]	14%
• Heroin	6%
• Other opiates/analgesics	4%
• Cocaine or crack	3%
Longest average period of abstinence	485 days (N=401)
Current episode is due to a DUII	44% (N=432)
Prior incarceration	69% (N=388)
Number of days of last incarceration	179 days (N=246)[36]
Current treatment episode is court-referred	70% (N=429)
• If court referred, participating in treatment court[37]	40% (N=302)
Past treatment for psychological/emotional problems	49% (N=405)
Average number of treatments (lifetime) for psychological/emotional problems for those with any such treatment	5 times (N=198)
• In a hospital	23%
• Outpatient treatment	44%
Emotionally abused in lifetime	59% (N=428)
Physically abused in lifetime	40% (N=426)
Sexually abused in lifetime	20% (N=425)
Have a chronic medical condition	45% (N=430)

In addition to the various substance abuse or dependencies, it is clear from Table 2 that study participants have considerable mental/physical health issues: half the study sample reported having prior treatment for mental health issues, with nearly one quarter of partic-

[34] D.T. is short for *delirium tremens*, delirium that is caused by withdrawal from alcohol.
[35] Ten percent of 12 month cannabis users reported having a medical marijuana card at baseline.
[36] Information from the provider dataset (N=25) was unclear about how to understand the values for this variable; therefore, they are not included here.
[37] Total number participating in drug court is 28% (40% of the 70% for whom treatment is court-referred).

ipants reporting mental health issues serious enough to require hospitalization. Nearly half (45%) reported having a chronic medical condition.

Key Measures of Interest from Baseline to 12-Month Follow-Up Interview

Across several measures from employment and income to abstinence, mental health, and social supports, study participants reported better situations than when they first entered treatment. Tables 3 through 11 explore study participant changes from baseline to 12-month follow-up interview. Data for both baseline and 12-month follow-up (primarily percentages of participants with a particular outcome) are reported for those participants who completed a 12-month survey to ensure an appropriate comparison; therefore, unless otherwise noted, N=432. **Statistically significant bivariate relationships (baseline to 12 months) are noted by a "*" next to the item description.** Details about the tests can be found in Appendix E.

Table 3 shows that more participants were employed at 12 months and they had higher incomes. This is especially notable given the high unemployment rate in Oregon during the study period.

Table 3. Comparison of Baseline and 12-Month Follow-Up Outcomes: Living Situation, Income and Employment Measures

Item description	Percentage of participants (unless otherwise noted)	
	Baseline	12 Months
Employment[38]*	(N=431)	(N=432)
• Full-time	16%	23%
• Part-time	15%	17%
• Retired/disability	7%	9%
• Student/volunteer	6%	9%
• Unemployed	51%	42%
Average Income* Median Income*	$1,009 (N=424) $612	$1,110 (N=431) $830
Have dependents relying on them for the majority of their food, shelter, etc.*	57% (N=428)	38% (N=432)
Living with someone with A&D problem?*	19% (N=406)	9% (N=428)
Controlled living status (past 30 days)[39]	(N=415)	(N=432)
• Jail*	13%	4%
• Inpatient A&D treatment*	13%	2%
• Other (sober house, psychiatric tx, etc.)*	6%	12%

[38] The only other employment category not included in this table is "in controlled environment" which accounted for the remaining percentage of participants at baseline and 12 months.
[39] At baseline, respondents could choose only one: on the 6- and 12-month surveys, the response option was changed to "all that apply" in order to better understand a participant's situation.

Although interviewers were unable to interview incarcerated participants, they were able to determine from online criminal justice databases that 26 more participants were incarcerated for some or all of the follow-up period. This undoubtedly exacerbated the reduced incarceration rate at follow-up.

Study participants who completed the 12-month interview collectively reported a higher rate of abstinence from both drug and alcohol use over the past 30 days, reduced binge drinking, and reduced amounts of money spent on both alcohol and drugs. Those with alcohol as their primary substance reported a 49% increase in abstinence from alcohol (35% to 52%).[40] For those who did drink or use, the average number of days they used declined. Drug use showed more dramatic reductions than alcohol use, although there were too few cases to draw conclusions about statistical significance. There was also decreased alcohol and drug use from 6 to 12 months, a point which will be further explored in the section on multivariate analyses. Table 4 displays information about alcohol and drug use at baseline and 12 months.

Table 4. Comparison of Baseline and 12-Month Follow-Up Outcomes: Alcohol and Drug Use

Item description	Percentage of participants (unless otherwise noted)	
	Baseline	12 Months
Abstinent from alcohol use (past 30 days)*	61% (N=387)	72% (N=432)
Abstinent from illicit substance use (past 30 days)*	58% (N=389)	90% (N=432)
Average # days longest period of abstinence from alcohol and/or illicit substances (past 30 days)*	18 days (N=377)	24 days (N=432)
Average # days of alcohol use (past 30 days) for participants reporting use*	9 days (N=150)	7 days (N=123)
Average # days of all illicit drug use (past 30 days) for participants reporting use[41]*	20 days (N=162)	24 days (N=44)
More than once substance used per day (past 30 days)*	20% (N=366)	6% (N=428)
For participants who said they spent money on alcohol or drugs in the past 30 days, the average amount of money spent:		
• Alcohol*	$87 (N=115)	$53 (N=108)
• Illicit drugs*	$645 (N=73)	$350 (N=19)

[40] Note that this is different than the proportion of study participants who reported drinking any alcohol at baseline, for whom there was a 63% increase in abstinence at 12 months.

[41] "Average days of drug use" is the total number of days in the past 30 days that a participant used each possible type of drug. For example, if the participant used cannabis on 20 days, methamphetamine on 10 days and prescription drugs (without a prescription) for 30 days, the total number of days will be 60. These totals are then averaged across clients. At 12 months 118 fewer clients report using but, on average, these 44 clients were using more frequently.

Table 5 shows information about substance use over the past 30 days for both intake and at 12-month follow-up. Alcohol was the most common substance of abuse/dependency followed by cannabis and amphetamine/methamphetamine. It is likely that the high number of missing substance data on the baseline surveys is due to interviewers not marking "0" for substances that clients did not use. This could mean that baseline rates reported are higher than they might actually be (if all those missing data were actually "0").

At the 12-month follow-up interview, very few participants reported using substances. As a precaution, when asking questions about substance use during follow-up interviews, interviewers were instructed to mention again that the information shared during the interview would be kept confidential.

Table 5. Comparison of Baseline and 12-Month Follow-Up Outcomes: Illegal/Non-Prescribed Substances Used in the Past 30 Days[42]

Substance Used	Percentage of participants (unless otherwise noted)	
	Baseline	**12 months**
Any alcohol*	39% (N=387) *100% (N=150)*	28% (N=432) *37% (N=150)*
Binge drinking (5+drinks in a few hours)[43]*	23% (N=381)	12% (N=430)
Alcohol to intoxication*	26% (N=358)	16% (N=432)
Cannabis*	29% (N=376) *100% (N=109)*	7% (N=432) *15% (N=109)*
Amphetamine/methamphetamine*	45 people (N=364)	10 people (N=432)
Other opiates/painkillers*	28 people (N=363)	11 people N=430)[44]
Prescription drugs (not prescribed or not for the prescribed purpose)*	22 people (N=336)	6 people (N=430)
Heroin*	16 people (N=360)	2 people (N=431)
Other sedatives or tranquilizers*	15 people (N=359)	1 person (N=431)
Cocaine*	13 people (N=359)	5 people (N=431)
Methadone[45]*	13 people (N=360)	3 people (N=431)
Barbiturates*	8 people (N=357)	0 people (N=430)
Inhalants	5 people (N=356)	2 people (N=431)
Hallucinogens	2 people (N=355)	0 people (N=431)
Uses tobacco on a daily basis*	72% (N=424)	66% (N=431)

[42] Selected outcomes for study participants who reported the various alcohol/substance use in the 30 days prior to their baseline interview is reported in italics – only for reported when the 12 month valid N≤10.
[43] For one provider (N=25), the definition used at baseline was 5 or more drinks in a day.
[44] The valid N for people who had used at baseline was less than 10, meaning that some participants who did not initially report use did so at 12 months.
[45] Please note that participants who use methadone as a prescribed medication-assisted therapy are not included in the figures for illicit methadone use in this table.

Overall, study participants reported improvement across every mental health indicator, as seen in Table 6 below. The percentage of participants reporting serious depression, anxiety, hallucinations, episodes of rage, and/or suicidal thoughts dropped by nearly half, though it is important to note that some of the numbers are very small (i.e., suicidal ideation/behavior). For those who did experience mental health issues at 12 months, the average number of days in the past month respondents experienced these issues declined by four days from baseline to follow-up. There was a very slight increase in the average number of days that respondents with medical issues reported experiencing such issues.

When examining outcomes only for study participants who reported mental health issues in the 30 days prior to their baseline interview (as measured by a composite of the various mental health issues), more dramatic declines occurred. For example, the percentage of those who reported depression in the 30 days prior to the intake interview declined 67% (from 100% to 33%), compared with a 44% decline in the full sample (43% to 24%).

Table 6. Comparison of Baseline and 12-Month Follow-Up Outcomes: Mental Health and Medical Issues in the Past 30 Days[46]

Mental health issue	Percentage of participants (unless otherwise noted)	
	Baseline	**12 months**
Experienced serious depression (past 30 days)*	43% (N=430) *100% (N=185)*	24% (N=432) *33% (N=185)*
Experienced serious anxiety (past 30 days)*	56% (N=430) *100% (N=241)*	35% (N=432) *47% (N=241)*
Experienced hallucinations (past 30 days)*	6% (N=431)	2% (N=432)
Experienced trouble understanding, concentrating, or remembering (past 30 days)*	42% (N=427) *100% (N=179)*	26% (N=430) *45% (N=178)*
Experienced trouble controlling violent behavior, including episodes of rage or violence (past 30 days)*	10% (N=430) *100% (N=430)*	5% (N=432) *6% (N=432)*
Experienced serious thoughts of suicide (past 30 days)	4% (N=431)	2% (N=431)
Attempted suicide (past 30 days)	1% (N=431)	0% (N=428)
Been prescribed medication for any psychological or emotional problems (past 30 days)*	23% (N=430) *100% (N=98)*	12% (N=432) *29% (N=98)*
Average # of days participants report experiencing any of the above psychological/emotional problems (past 30 days)*	19 days (N=213) *19 days (N=213)*	15 days (N=201) *13 days (N=150)*
Average # of days participants report experiencing any medical issues (past 30 days)	15 days (N=166)	15 days (N=152)

[46] Selected outcomes for study participants who reported the various mental health issues in the 30 days prior to their baseline interview reported in italics. Data not reported when the 12 month valid N≤10.

Both the baseline and 12-month interviews also asked questions about whether participants were currently in treatment, if they tried to access treatment services; if so, what types of treatment they tried to access, and how long the wait time was getting into treatment. At 12 months follow-up, more than one-quarter of participants were still in treatment (compared with 46% at 6 months). About one fifth of 12-month participants reported trying to access self-help groups, while another 9% tried to access outpatient treatment. For those responding to the question about accessing services at a community clinic, three-quarters were able to access services and the average wait time was about 2 weeks. Table 7 provides a summary of these data.

Table 7. Comparison of Baseline and 12-Month Follow-Up Outcomes: Treatment Services[47]

Item description	Percentage of participants (unless otherwise noted)	
	Baseline	12 months
Currently receiving substance abuse treatment*	100% (N=432)	28% (N=432)
Tried to access a self-help group (past 30 days)*	36% (N=276)	19% (N=431)
Tried to access outpatient A&D treatment at a community clinic (past 30 days)*	46% (N=297)	9% (N=430)
Tried to access residential A&D treatment at a community clinic (past 30 days)*	20% (N=271)	1% (N=430)
Tried to access detoxification services (past 30 days)*	11% (N=273)	1% (N=430)
Tried to access A&D treatment at a local community hospital (past 30 days)*	4% (N=270)	<1% (N=430)
Tried to access A&D treatment at a public health clinic (past 30 days)	3% (N=271)	1% (N=430)
For those who tried to access treatment at community outpatient or residential clinic, received those services	95% (N=149)	77% (N=43)
For those who were able to access outpatient or residential A&D treatment services at a community clinic, average wait time	10 days (N=66)	13 days (N≤10)**
Using medication-assisted therapy for substance abuse[48]	3% (N=427)	5% (N=432)

** For those items where there are 10 or fewer respondents "N≤10" ensures client confidentiality.

The proportion of participants who reported attending self-help groups at 6 and 12 months was linked to whether they were still in treatment, which often requires self-help group attendance as part of the treatment plan. At 6 months, 82% of participants who were still in treatment reported attending self-help groups, while 78% of those still in treatment at 12 months were attending self-help groups. Conversely, of the participants

[47] Note that when the baseline sample size is quite small, caution in interpretation is needed.
[48] Please note that participants using methadone as a prescribed medication-assisted therapy are not included in these figures.

who were *not* in treatment at 6 months, only 36% reported attending self-help groups, while 34% of those *not* in treatment at 12 months said they attended self-help groups.

Of the 198 participants at 12 months follow-up who reported actually attending self-help groups, 53% said they attended 3 or more times per week, 35% attended 1 to 2 times per week and the remaining 12% said they attended 1 to 2 times per month.

At intake, small number of participants (14 at intake) reported using medication-assisted therapy for their alcohol/substance use and all of them felt that they still needed to take these medicines. At 12 months, 20 participants reported using medication-assisted therapy, and a third (6) of them felt that they no longer needed to take these medicines. Thirteen people (68%) said that they always take these medications just as the doctor prescribed, five others said that they take the medications according to doctor's orders most of the time, but that they forgot sometimes. Eighteen people reported that their medications were working fine, but four said that they could not afford these medications.

Table 8 below shows some of the criminal justice outcomes for study participants. At 12 months, fewer participants reported having been arrested in the past 30 days and were incarcerated for shorter times. Part of the reason is that many participants who came into treatment at baseline had just been released from incarceration and entered treatment; therefore, they would necessarily average fewer days of incarceration. It is important to note that there are 26 known participants who were incarcerated during some or all of the follow-up period and were therefore unable to be interviewed.

Table 8. Comparison of Baseline and 12-Month Follow-Up Outcomes: Criminal Justice Involvement[49]

Item description	Percentage of participants (unless otherwise noted)	
	Baseline	12 months
Arrested in the past 30 days*	15% (N=309)	2% (N=432)
For those who were incarcerated in the past 30 days, the average days of incarceration*	12 days (N=56)	7 days (N=19)

Study participants also were asked for their perspective on how well they were doing in their recovery process (Table 9). Percentages of those who responded "strongly agree" are shown because this response shows the highest degree of commitment. More than half of respondents said that they were not likely to use alcohol or other drugs, progressing in their recovery goals, and that the recovery skills they have are working well for them. At baseline, 12% *disagreed* that they were not likely to use alcohol or drugs (in other words, that they *were* likely to use alcohol or drugs) and this increased slightly to 14% at follow-up. None of the other questions were asked at baseline.

[49] Because there were 26 known participants who were incarcerated during some or all of the follow-up period and were unable to be interviewed, the 12-month information in Table 8 is certainly underestimated.

Table 9. Comparison of Baseline and 12-month Follow-Up Outcomes: Clients' Perceived Outcomes[50]

Item description	Percentage of participants who strongly agree	
	Baseline	12 months
I am not likely to use alcohol and/or other drugs*	42% (N=430)	57% (N=431)
I am making progress in my wellness/recovery goals	na	60% (N=428)
I am doing well in my wellness/recovery goals	na	55% (N=425)
The wellness/recovery tools and skills that I use are effective for me	na	56% (N=426)

Because of the importance of having social support to the recovery process, participants were asked about this at both at baseline and 12-month follow-up (Table 10). Generally speaking, the proportions of respondents increased from baseline to follow-up by a few percentage points across each indicator. Very few participants disagreed at either time point. The strongest increase (11 percentage points or a 23% increase) was for having friends who are clean and sober, which is often a byproduct of treatment.[51] This result is further underscored by the multivariate analysis presented in the next section.

Table 10. Comparison of Baseline and 12-Month Follow-Up Outcomes: Social Connectedness[52]

Item description	Percentage of participants who strongly agree	
	Baseline	12 months
There is someone who cares about whether I am doing better	71% (N=429)	78% (N=432)
I have someone who will help when I have a problem*	68% (N=430)	73% (N=432)
I have people in my life who are a positive influence	69% (N=428)	70% (N=432)
The people I care about are supportive of my recovery	67% (N=429)	72% (N=425)
People count on me to help them when they have a problem	40% (N=428)	39% (N=431)
I have friends who are clean and sober*	48% (N=430)	59% (N=431)
I have someone who will listen to me when I need to talk	63% (N=430)	65% (N=432)

[50] These items are subscales on the CalMend CIOM. Response options are "strongly agree," "agree," 'somewhat agree," and "disagree." "Na" indicates that these questions were not asked at baseline.
[51] Please note that percentage change is calculated by subtracting the later value from the earlier value and then dividing by the earlier value: (48% - 59%)/48% = 23% increase.
[52] These items are subscales on the CalMend CIOM. Response options are "strongly agree," "agree," 'somewhat agree," and "disagree."

Table 11 provides information about whether participants felt they had a substance abuse problem. At baseline, 43% of respondents strongly agreed they had an alcohol or drug problem and that they needed to work on this problem. At follow-up, this dropped to about 27%. About one fifth of participants strongly agreed that they had alcohol problems at baseline and that dropped to 13% at follow-up. The proportion of participants reporting a drug problem at baseline decreased from 27% to 1% from baseline to 12-months follow-up.

The "disagree" responses are also quite revealing. In particular, the proportion of "disagree" responses increased from baseline to follow-up for the first two items in Table 11: at baseline 26% of participants *disagreed* that "alcohol or drugs is a problem for me" and this increased to 51% at 12 months. Similarly, 18% of respondents at baseline *disagreed* with the statement "I need to work on my problems with alcohol and/or drugs" and this increased to 44% at 12 months. Given the other positive results in the report, it is possible that participants believe they no longer have a drug or alcohol problem.

Table 11. Comparison of Baseline and 12-Month Follow-Up Outcomes: Clients' Recognition That They May Have a Problem[53]

Item description	Percentage of participants who strongly agree	
	Baseline	12 months
Using alcohol and/or drugs is a problem for me*	43% (N=428)	27% (N=430)
I need to work on my problems with alcohol and/or drugs*	47% (N=428)	23% (N=431)
Reported having "alcohol problems" in the past 30 days*	22% (N=367)	13% (N=432)
Reported having "drug problems" in the past 30 days*	27% (N=353)	1% (N=432)

Finally, participants were asked about their satisfaction with treatment services (Table 12). Between 39% and 47% strongly agreed with the various statements about their treatment experience. The one exception to this level of satisfaction was about the convenience of transportation to treatment, where only 32% of participants strongly agreed and 16% disagreed.

[53] The first two items are subscales on the CalMend CIOM. Response options are "strongly agree," "agree," 'somewhat agree," and "disagree." The second two items are from the ASI Short Form ("ASI Lite").

Table 12. Client Satisfaction With A&D Treatment Services at 12 months[54]

Item description	Percentage of participants who strongly agree/agree
When I needed services right away, I was able to see someone as soon as I wanted	79% (N=429)
The people I go to/went to for services spent enough time with me	86% (N=431)
I helped to develop my service and treatment goals	88% (N=431)
The people I went to for services were sensitive to my cultural background	92% (N=426)
I was given information about different services that were available to me	88% (N=429)
I was given enough information to effectively handle my problems	89% (N=430)
Transportation to and from treatment is convenient*	72% (N=424)

TREATMENT DISPOSITION AND RELATED INFORMATION

Participating treatment agencies were asked to complete a discharge summary (Appendix D) for all study participants upon each client's exit from treatment. Of the total of 592 eligible clients, treatment agencies provided 447 discharge summaries, 359 (83%) of which were for study participants who had completed the 12-month survey. An additional 18 clients were still receiving treatment as part of the same treatment episode that made them eligible for this study, bringing the total of 12-month participants with treatment disposition data up to 377 (87%). It should be noted that many treatment providers seemed not to have this information in an easy-to-access digital format. In fact, some treatment agency staff had to pull client files and sift through them by hand in order to provide the needed information. Table 13 displays discharge summary information for participants who completed 12-month interviews.

[54] These items are subscales on the CalMend CIOM. Response options are "strongly agree," "agree," 'somewhat agree," and "disagree."

Table 13. Discharge Summary Outcomes for A&D Treatment Services

Item description	Percentage of participants who strongly agree/agree
Average length of stay in treatment this episode	121 days (N=344)
Average number of group sessions	41 sessions (N=359)
Average number of individual sessions	5 sessions (N=359)
Exit status[55]	(N=369)
• Successfully completed treatment[56]	64%
• Termination/dropped out of treatment	30%
• Neither successful nor unsuccessful treatment completion[57]	6%
Provider's assessment of substance use at exit (as compared with baseline)	(N=305)
• No use at exit	58%
• Less substance use	22%
• No change	12%
• More substance use	1%
• Unknown or not assessed	8%

"Just the knowledge I got from drinking and driving. The atmosphere was very positive. The counselor was a great - a great speaker, very knowledgeable, very nice. He let everybody know they were there for a purpose. He didn't humiliate you."

~Study Participant

[55] Other exit status types include 'client incarcerated' and 'termination due to mental health' (both 0.8%); 'client moved' and 'initial appointment not kept within 14 days' (both 0.6%).
[56] Successful treatment completion is determined by the treatment provider in accordance with CPMS guidelines: at minimum, the client has achieved at least two-thirds of his/her signed treatment plan and is no longer abusing and/or is abstinent 30 days prior to termination.
[57] This category includes 18 clients still in treatment, as well as two clients who moved out of area, one who did not have transportation to the treatment facility, one who could not make it to treatment during facility hours and one client who was listed as being withdrawn from treatment by parent or guardian.

Open-ended Responses at 12 Months

The final questions on the 12-month survey were about what study participants like best about their treatment experience and what, if anything, they would like to see changed. The comment boxes throughout this report are taken from these two questions. It was clear that, for many participants, the opportunity to answer these two questions was the most meaningful part of their study participation; many provided thoughtful and constructive feedback for the treatment agencies about what about the treatment experience worked and what did not. The vast majority of clients reported having a positive experience overall. Some themes did emerge from this qualitative information; these are listed below with representative participant quotes.

In response to the question, "What was the most helpful service or support that you received from [treatment provider]?"

Overall support

- "Everything. They saved my life several times."
- "They had everything I needed."

Individualized treatment/individual counseling

- "The individualized care they provided. I just wasn't another case. They took a lot of time to get to know my issues and problems. They addressed my specific issues. They did whatever they had to, to help me."
- "The one-on-one counseling. The counselor taught me about mindfulness, which helped me control my anxiety. I thought it was great that she helped me with that rather than superficially treating my issues with alcohol."

Groups/relationships with peers

- The group meetings. The interactions and ability to speak was very comfortable and the environment was great. The method of mixing new and old patients was helpful."
- "It's all about the people. Making a connection with people that was meaningful was helpful. Sharing in the groups was helpful."
- "Women's group. [I'm] comfortable talking with only women."

Education

- "Scientific information regarding addiction and the brain. [It] explained how addiction works and that was helpful. It was great."

Housing

- "They helped me get into transitional housing after treatment. This was amazing because I was homeless before treatment. Now I am in school and doing well."

Other services

- "All women's group. I liked the content about healthy relationships..."
- "Mental health counseling. I saw a mental health professional and she put me on anti-depressants. It was like someone flipped a switch on in my brain. It was amazing."

- "Acupuncture treatment. The meditation aspect made me really think about myself and my issues. They do a really great job at [treatment provider]."
- "Bus voucher was greatly appreciated."

In response to the question, "What would you change about the treatment services you received from [treatment provider]?"

Provide more individual sessions/increase staffing levels

- "They need more one-on-one support. It would be helpful to have regular one-on-ones with the same counselor, so that there is more consistency in follow-ups."
- "I only saw the counselor about once every 2.5 months for one-on-ones for 15 minutes if that. I think that's why my time with [provider wasn't successful.
- "I wish there were more counselors. When I needed a counselor, I couldn't see one. They were always busy and hard to see."

Keep group size down/increase staffing levels

- "The groups were too big. They had 30+ girls in them. I felt like it was wasted time because the counselor couldn't possibly interact with everyone."
- "They do not have enough staff to handle their case load. Staff consistently called me by the wrong name. How can you expect clients to build trust when you can't remember their name?"

Ensure that staff maintains a fair and non-judgmental attitude toward all clients

- "They shouldn't be judgmental just because you are a certain race. They assumed certain races did certain things."
- "More empathy from the staff. They think everyone is lying. No respect."
- "They treat everyone like cattle and have no respect for the individual."

Reduce/be flexible with treatment costs

- "Staff [need] to be more understanding of financial hardships. It felt like blackmail when the staff would threaten to notify the court that I was not fulfilling my requirements when I could not pay."

Tighten the program structure/accountability/consistency

- "UAs were not always observed. Staff was too lenient with rules."
- "It was more about attendance than actually learning about addiction."
- "The counselors and staff…are inconsistent with treatment plans, rules, and guidelines."

Provide more/different services

- "I wish I could go more than once a week."
- "I wish they provided aftercare. I could have used support after exiting."
- "I wish they had mental health resources."
- "More family support."

Change location and/or provide transportation support; provide a wider range of treatment times

- “Make it more accessible. Have different locations than [location]… It's hard to go to treatment, when it's also your drug area.”
- “There's no weekend class. Most people work during the week…I'm scheduled to work, but I tell them I have to leave for class.”
- “Bus passes and transportation for people so they can get help.”

Separate clients according to their specific issues

- “I was at inpatient with mostly drug addicts. As an alcoholic, much of the material was a waste. They should have drug and alcohol patients separate.”
- “Put people in appropriate groups. For example, they shouldn't place people who use marijuana with people who are addicted to meth or heroin.”

Update program materials

- “Some of their videos were really outdated. They addressed this, and said that some of the information in them was inaccurate.”

Improve bookkeeping practices to be more accurate

- The bookkeeping was terrible. Many times I paid, but they didn't recognize that I had.

In summary, study participants provided qualitative feedback on their experiences and insights while attending treatment. The consumer perspective is, for the most part, echoed by the data. This consumer perspective is, for the most part, echoed by the data. Many of the recommendations in this report are, in part or in total, derived from this feedback. Providing a greater role for consumers in program evaluation and the ongoing quality improvement of treatment systems is a low-cost method for doing this.

"Hire more counselors to talk with people who are in distress. I saw them shuffle crying women out just because they were off the clock. They treat everyone like cattle and have no respect for the individual. The receptionists are rude and act like the police. It takes too long to get treatment. I was sober eight months before the court sentenced me to [treatment agency]. Then it took another three months for [treatment agency] to get me in."

~Study Participant

MULTIVARIATE OUTCOMES ANALYSIS

Background & Purpose

Previous evaluation research in the area of alcohol and substance abuse treatment has suggested individual level characteristics such as social support networks, employment, mental health history, and socioeconomic status predict successful program completion and continued sobriety (McCarty, 2007; Kaskutas, Bond, & Humphreys, 2002; Roll et al, 2005; Weisner, Matzger, & Kaskutas, 2003; Walton, Blow, Bingham, & Chermack, 2003). The current dataset offers a unique opportunity to examine predictors of abstinence and other treatment outcomes from a sample of Oregon clients and explore how results from this study match with previous research. For the multivariate analyses, we opted to look at four separate outcomes at the 12 month survey: sobriety from drugs and alcohol, sobriety from alcohol, employment status, and days of alcohol use. The initial analysis plan was to examine sobriety from drugs at 12 months and housing status at 12 months; however, the small number of individuals in these categories (only 47 individuals reported using drugs at 12 months, and only 13 individuals reported no stable housing at 12 months) precluded running these analyses.

Methods

In order to determine which measures to examine as potential predictors of treatment, we explored peer reviewed literature regarding evaluation of alcohol/drug treatment programs, reviewed participant comments from this study regarding portions of the program they found to be meaningful, and conducted exploratory bivariate analyses (e.g., comparing one independent variable at a time to the outcome variable). A complete list of variables examined as well as coding comments can be seen in Appendix F. After indentifying relevant independent variables, we entered these variables in stepwise logistic multiple regressions with biological variables on the first step (e.g., gender and age), sociodemographics on the second step (e.g., education and abuse history), social support on the third step (having sober friends, perceived conflict in social support structure), and treatment variables on the fourth step (e.g., treatment outcome and sessions attended).[58] Individuals with missing data or missing 12 month outcomes were excluded from the regression analyses, resulting in a total sample size of 304 individuals.[59]

In addition to the multiple regressions, we also used Hierarchal Linear Modeling (HLM) to examine days of drinking and days of drinking to intoxication at baseline, 6, and 12 months.[60] HLM is a useful statistical procedure for analyzing nested data (e.g., different levels in the dataset, such as individual/group level variables or different time points). HLM is useful in evaluation research due to its robustness to missing data and the ability

[58] Please note that sessions attended were treated as a continuous variable, and we elected to look only at individual sessions, given that there was anecdotal evidence in participant responses to open ended questions that more individual sessions were useful in maintaining abstinence.

[59] A variable describing number of days of most recent incarceration at baseline was also dropped due to missing data, although bivariate analyses suggested this variable may have a relationship to abstinence at twelve months. Future research in this area should strive to re-examine this effect to determine the robustness of the finding.

[60] HLM is similar to the SAS PROC MIXED procedure.

to easily look at not only differences in means but in rates of change. In our case the nested design is using multiple time points. HLM also allowed us to optimize the number of cases in the analysis by using pairwise rather than listwise exclusion of missing data as well as to examine not only the average number of days drinking, but also the rate of change over time. Analyses done in HLM used the only significant predictors found in the regression equations in order to maximize analysis power.

Results

The first regression focused on predicting sobriety at 12 months from both drugs and alcohol. We found that the variables in this regression explained approximately 16 percent of the variation in outcomes. It should be noted that the effect size is low, even though the correlation is significant. Individuals who were in treatment due to a DUII were only one-third as likely to report sobriety as individuals who were not referred due to a DUII, controlling for all other variables. Similarly, individuals whose highest educational attainment was a high school diploma or GED were only one-third as likely to report sobriety as individuals who did not have a GED/high school diploma, controlling for all other variables. Individuals who were over 50 were over 3½ times more likely to report sobriety than individuals under 50. We also found that individuals who reported having sober friends both at baseline and 12 months were 2½ times more likely to maintain sobriety at 12 months than individuals who did not report having sober friends at both time points, controlling for all other variables.

The second regression focused on predicting sobriety at 12 months from alcohol only. The outcomes were the same as when predicting sobriety from drugs and alcohol, with the exception of a slightly lower effect for having sober friends (individuals with sober friends were a little less than twice as likely to maintain sobriety, rather than 2½ times), and a slightly lower effect for age (individuals over 50 were a little over 3 times more likely to report sobriety, controlling for all other variables). The variables in this regression explained 18 percent of the outcome. Again, although this is a relatively small effect size in social science, the finding is still statistically significant.

When looking at employment at 12 months, we found that only one variable was predictive- employment status at baseline. Not surprisingly, individuals who were employed at baseline tended to be employed at 12 months. These individuals employed at baseline were four times as likely as individuals who were not employed at baseline to be employed at 12 months after controlling for all other variables.

The HLM analyses were useful in examining the number of days an individual used alcohol at baseline, 6, and 12 months, as well as the number of days an individual drank to intoxication at baseline, 6, and 12 months, after controlling for demographic variables such as age and gender. Table 14 presents the average days with any alcohol use at each time point.

Table 14. Average Days With Any Alcohol Use Over Time, Controlling for Age and Gender

	Days drinking at baseline	Days drinking at 6 months	Days drinking at 12 months
Overall mean	**3.6**	**2.8**	**1.9**
Individuals with a DUII	2.5*	2.7*	2.9
Individuals with a GED	4.6	3.7	2.7
Individuals with friends who are sober	2.3*	1.5*	0.5*

*significantly different from the overall mean, p<.05

In addition, at all three time points, individuals with a DUII have a flatter slope (e.g., change at a lower rate on days sober) than individuals without a DUII. Table 15 presents the average days drinking alcohol to intoxication at each time point.

Table 15. Average Days Drinking Alcohol to Intoxication Use Over Time, Controlling for Age and Gender

	Days drinking at baseline	Days drinking at 6 months	Days drinking at 12 months
Overall mean	**2.7**	**2.3**	**1.8**
Individuals with a DUII	1.5*	1.7*	1.8
Individuals with a GED	3.3	2.8	2.1
Individuals with friends who are sober	1.4*	.9*	.4*

*significantly different from the overall mean, p<.05

In addition, at all times, individuals with a DUII have a flatter slope (e.g., change a lower rate on intoxicated days) than individuals without a DUII.

Discussion

Some results from the regression equation are consistent with previous research in this area when looking at social support variables (e.g. having sober friends). Other findings in the research literature were significant in bivariate analyses (e.g. mental health symptoms) but were not significant in the final regression models. The findings for this Oregon sample of treatment clients are consistent with previous published research suggesting the treatment needs and treatment experience of individuals mandated to treatment after a DUII are different than non-DUII individuals (e.g., Dill & Wells-Parker, 2002). The findings that individuals over 50 are more likely to report being abstinent and that individuals with a GED\high school diploma are less likely to be abstinent do not completely match with previous research. Previous research on alcoholism has suggested that older individuals with alcohol problems leave programs at a higher rate and may have

worse outcomes (e.g., Booth et al, 1992), and that individuals without a GED\high school diploma may show higher rates of substance abuse (e.g., Crum et al, 1992). However, the population in the current study differs from much of the published research due to the non-voluntary nature of treatment for a high proportion of the sample, as well as the inclusion of individuals with a DUII. Previous research on trajectories of alcohol use over time (e.g., Muthen & Muthen, 2006) point out the non-linear progression of alcohol and substance use over time, and the need for longitudinal data to adequately understand this relationship, complicating our interpretation of sobriety over one single year.

When examining the regression models, we find the level of variance explained by the models is somewhat low (e.g., approximately 18 percent) suggesting there are other variables in play which may better predict abstinence from drugs and alcohol. It is possible that individuals in the study may have been reluctant to disclose information to interviewers, which would affect the ability to find statistically significant predictors of abstinence. Nonetheless, the regression equations point out differential treatment effects for individuals entering treatment after a DUII charge, for individuals with a GED/high school diploma, for individuals over 50, and for individuals reporting stable sober friends. These findings suggest additional screening for those individuals entering treatment with a DUII or higher education levels may be useful in improving treatment outcomes, consistent with previous research calling for attention to be paid to the match between client need and treatment structure (e.g., Woody & Munoz, 2000). There is a good amount of previous research highlighting the issue that individuals referred for DUII treatment may be different from individuals presenting from other treatment sources in terms of diagnostic profiles and commitment to treatment and may be an under-researched group (e.g., Dill & Wells-Parker, 2006). In addition, encouraging individuals to integrate sober individuals into their social support structures may encourage longer term sobriety, a finding which is supported by previous research as well.

One of the major findings of the current study is the heterogeneity of the sample. Differential outcomes were present for different ages and DUII/non-DUII groups and individuals with more severe drug use tended not to complete instruments. In addition, the amount of variation we were able to explain was relatively low. This suggests other unifying variables may help to predict outcomes and improve treatment. One possible variable which has been shown to assist in predicting outcomes across groups is the stages-of-change model (e.g., Prochaska et al., 1992). It may be useful to add a *stages of change* questionnaire to initial screening instruments to help program managers better match program participants to the treatment model.[61] This has been shown to be effective in improving substance abuse outcomes when doing motivational interviewing, which often focuses on moving individuals to a state where they wish to engage in behavior change. Tailoring programs in this manner may help to reduce differential outcomes and increase satisfaction with treatment.

Hierarchal Linear Modeling results are consistent with, and add to, the regression results. Overall, there is a significant reduction in days of any drinking as well as the number of days drinking to intoxication during the study. Interestingly, individuals in the program

[61] Please note that we attempted to examine this by including baseline questions in the regression models which asked how important the individual felt treatment for drug or alcohol problems was. These questions were non-significant, possibly due to these questions not being assessing specific behavioral motivators and patterns.

for a DUII charge report fewer days of drinking (and fewer days of drinking to intoxication) at baseline and 6 months, and then conform to the overall mean at 12 months. They also change at a different rate: rather than reduced days of drinking over time, their rate of drinking is flat (i.e., they had about the same number of days drinking at all three time points). Combined with the regression results, this suggests individuals in the program for a DUII charge do drink less than individuals not in the program for a DUII charge, but are less likely to be completely abstinent from drinking and have less change over time in their drinking than other individuals entering treatment not due to a DUII charge. In contrast, individuals who report having sober friends at baseline and 12 months drink less at all time points than individuals who do not report having sober friends at baseline and 12 months, but reduce their days of drinking (and drinking to intoxication) at the same rate as the other individuals.

Limitations

The current study used a quasi-experimental design whereby sample subjects acted as their own controls (e.g., their responses were compared at baseline, 6 months, and 12 months of treatment). This is an accepted and commonly used technique in evaluation research, although not without limitations. It would have been preferable to have had a control group of people similar to those in the study who were substance abusers—but did not access treatment—to help determine whether the changes from baseline to follow-up were due to the treatment intervention or another variable such as passage of time or overall system change. However, it is important to note that study designs involving a control group are extremely costly and random assignment to treatment and control group for the duration of a longitudinal study is unlikely to be either an ethical—or workable—option.

There were some key differences between those who agreed to participate in the study at baseline and those who refused to participate by race and gender. Additionally, those not involved in treatment courts tended to refuse at a higher rate. Because of this, the AMH study sample cannot be seen as randomly selected from all publicly funded treatment clients in Oregon. However, the 592 eligible clients do represent a large segment of the population of alcohol and drug use treatment clients entering treatment in Oregon from February 1 through April 30, 2010.[62]

The follow-up rate of 73% is respectable for such a study, but there are still a sizeable number of participants for whom there is no follow-up data.[63] These people are likely to be different in some way from those who did complete the 12-month interview. Indeed, a refusal analysis of participants who did not complete the 12 month survey with those who did found the 12-month refusers more likely to be male, less educated, and more likely to be using ‘hard core’ substances (such as heroin, cocaine, prescription drugs, etc.) than those who completed a 12-month survey. Although this might be seen to constitute a

[62] Information about how representative the 15 participating treatment providers were from the universe of those that provide publicly-funded A&D treatment services in Oregon was not available. Similarly, the demographics and other key characteristics of publicly-funded treatment clients statewide were not available. Having this information might help determine how representative the 592-client sample is as compared with clients statewide.

[63] In fact, because no discharge summaries were received for 80 study participants, it is possible that some of these people would not be eligible for the study. If so, the response rate could be lower – or higher – than 73% and the refusal analysis might also reveal different trends.

source of study bias (albeit one that is well-known in addictions research), it is important to point out that the majority of participants had a prior record of incarceration and prior drug and/or alcohol treatment, which does indicate that this sample is not widely divergent from similar populations, despite the differences in refusers listed above.

There were also missing data among many of the baseline indicators and discharge summary measures. It is unclear whether the baseline questions were asked and not recorded or whether the blank survey items were meant to indicate "0." This could mean that the actual baseline substance usage is lower than what is reported here (if all the missing data were "0" instead), and therefore the change over time between baseline and follow-up is less than this report indicates. For one provider's clients (N=25 at 12 months), the baseline instrumentation was slightly different[64] and, there are a few indicators for which no data are available. Regardless of the reason, however, missing data at baseline is another source of bias.

Studies based upon self-reported data, particularly data about socially proscribed behaviors, are likely to experience under-reporting of illegal or socially unacceptable behaviors. At the same time, it is important to note that self-report is a standard method for substance abuse and addictions research: the vast majority of existing research and evaluation studies use self-report – including GAO-approved GPRA data collection.[65] Moreover, rigorous training of follow-up interviewer staff and weekly staffing meetings to discuss issues that come up in the tracking or interviewing process provided standardization to data collection, which helps ensure measurement validity and reliability (Del Boca & Noll, 2000).

As noted, we could not conduct analyses on sobriety from drugs at 12 months or on homelessness at 12 months due to having too few cases. This makes it difficult to assess whether different variables predict sobriety for alcohol vs. drugs (as has been noted in the research literature. It is also possible the 12 month follow-up was not long enough post baseline to see lasting treatment effects, a finding supported by other researchers (Hubbard, Craddock, & Anderson, 2003; Stout et al., 1999). Lastly, the regression results suggest there are additional variables not captured which may help to better predict sobriety. Future evaluation of these programs should take this into account when designing research instruments and determining what data to collect.

The limitations mentioned above are commonly found in addictions treatment research. Despite these limitations, the data collected at baseline, 6 months, and 12 months follow-up constitute an unprecedented source of information for Oregon policymakers and treatment providers to use for program improvement and decision-making.

[64] See footnote 15 above.

[65] Although self-report is sometimes supplemented with drug testing, this was not possible given the budget for this study, not to mention the fact that "objective" alternatives such as drug testing have their own inherent problems (such as lack of standardized procedures at providers - random sampling, full observation, method of drug testing, false positives, false negatives, etc.).

CONCLUSION AND RECOMMENDATIONS

Substance abuse and dependency treatment clients from around the state of Oregon collectively reported increased abstinence from alcohol and illicit drugs. For those who *did* use alcohol or drugs, study participants reported fewer days of use from baseline to 6 months to 12 months post intake. Other positive results were also found, such as increased income, decreased unemployment reduced mental health issues, increased social supports, and a high level of satisfaction with their treatment experience.

Many lessons can be drawn from the data presented throughout the report. Research-related lessons learned and ideas for future research raised by this study can be found in Appendix G. Several programmatic and policy recommendations are suggested below based both on survey results and study participant feedback.

Recommendations

- **Specialized programming for DUII clients.** The findings in this report are consistent with previous research suggesting individuals in treatment for a DUII charge are different from individuals not in treatment for a DUII charge, and are themselves a heterogeneous group (e.g. Dill & Wells-Parker, 2006). This was also reflected in the open-ended comments of individuals in treatment for DUII charges. When designing effective services for this group additional needs assessment may be required to establish a better fit between individual needs and program effectiveness.
    - Greater emphasis should be placed on not driving under the influence rather than not drinking at all (harm reduction model). For example, one of the study participants suggested mandatory participation in victim's impact panels and breathalyzers for DUII offenders for one year.
- **Enhanced attention to matching individual needs to program type.** Similar to the recommendation above for DUII clients, it is important to recognize the other client characteristics that may require specialized programming or at least specialized attention:
    - **Treatment matching by addictions/abuse issue.** Numerous study participants gave feedback that clients should be separated into specialized groups by specific substance(s) used and whether they are dependent on alcohol/drugs or are abusers. Clients who were "lumped together" felt that the treatment providers did not understand or care about clients. This perception alone could create an alienating atmosphere. There is research to support participants' beliefs that matching client needs to treatment type is effective (e.g., Witkiewitz, Hartzler, & Donovan, 2010) and, in fact, not doing so can result in poorer outcomes, particularly in the drug treatment court context (Marlowe, et al., 2007).[66] Furthermore, research has shown that treatment matching clients with the highest severity to more intensive treatment modalities is cost-effective (Chen, Barnett, Sempel & Timko, 2006).

[66] Please note that there is still some controversy about the benefits of treatment matching (e.g., Babor, 2008).

- **Culturally and linguistically-appropriate programming**. A handful of Latino study participants (and other cultural/ethnic minorities) expressed the concern that language specific programming was not available. For those mandated to treatment, not being able to understand the counselors or curriculum materials is a serious barrier to positive outcomes. Participants felt that the lack of cultural sensitivity was a barrier. Conversely, Latino participants with a Latino counselor felt that their treatment experience was greatly enhanced, which is reflected in other research (Castro, F.G. & Alarcon, E.H., 2002).[67]
- **Sensitivity to the needs of disabled clients**. At least two participants disclosed that they felt that their treatment providers were unequipped to deal with their disabilities.
- **Engaging younger treatment clients.** The findings of this report that clients over 50 were more likely to maintain sobriety are also consistent with research showing that younger clients do not fare so well in treatment. While this may, in part, be a developmental phenomenon, study participant feedback about how outdated some curricular material could also be a contributory factor. Particularly true of the digital age, treatment providers might consider innovations such as daily text messages, YouTube videos, and other media that are part of today's multimedia culture.

- **Focus more on identifying and creating opportunities for social support networks for recovery.** The finding that support from friends for sobriety is a predictor of sobriety at 12 months suggests that program managers may wish to evaluate social support at baseline as well as encourage contact with sober friends and involvement in sober communities in order to maximize treatment success.
- **Provide resources and oversight to ensure adequate staffing levels at treatment agencies.** Discharge summary data shows that treatment agency clients average slightly more than one individual counseling session per month. Study participants commented repeatedly that the best part of their treatment was their opportunity to meet with their counselor individually and recommendations for program improvement similarly highlighted their desire to meet more frequently with their counselor. Research has shown that the client-counselor relationship is a crucial piece of the puzzle of successful treatment outcomes and this is why most evidence-based substance abuse/dependency treatment practices require at least weekly individual sessions for the early weeks of treatment (e.g., Mercer & Woody, 1999).[68] Without further information, it is assumed that the primary barrier to ensuring individual counseling occurs at least weekly for the first 2 months of treatment is inadequate resources. Further discussion between AMH and treatment agencies might reveal other barriers to ensuring an adequate level of one-on-one counseling.

[67] This overview article in the Journal of Drug Issues shows that using cultural specific language and cultural adaptations of evidence-based programs greatly increase program effectiveness. (PDF is available at http://www.360translations.com/educ533/integrating.pdf)

[68] This NIDA treatment manual on cocaine addiction recommends 1:1 counseling twice-per-week for the first 12 weeks, and then once once-per-week for the next 12 weeks. (http://archives.drugabuse.gov/TXManuals/IDCA/IDCA5.html).

- **Recognize that there are people for whom self-help groups do not work and therefore other aftercare options may be needed.** Many study participants expressed the desire for more/any aftercare services. Data from this study also show that at least one third of participants who had completed treatment were not participating in self-help groups, which is one of the most common aftercare strategies and has been shown to help maintain sobriety (Kaskutas, 2009). Research shows that many people who might benefit from self-help groups do not attend due to the perceived religious aspects of many 12-step meetings, prior negative experiences with 12-step meetings, lack of identification with other group members (Lopez Gaston, Best, Day & White, 2010: 306), and the tendency for 12-step programs not to support use of prescribed psychiatric medicines (Kelly, Kahler & Humphreys, 2010). Other aftercare options should be available for clients for whom traditional 12-step group participation is not perceived to be helpful.
- **Provide resources and oversight to ensure adequate drug testing at treatment agencies.** Several study participants noted that UAs were not given frequently; one person said that UAs were given only once per month. Research in the drug court context (Carey, Mackin, & Finigan, in process) shows that drug testing 2 times per week is significantly related to positive outcomes.
- **Provide resources to strengthen treatment providers' capability to systematically collect and analyze treatment data.** While participating providers were generous enough to contribute their own time and effort to this study, it was evident that, for most providers in the current fiscal environment, their priority was necessarily day-to-day operations rather than long-term evaluation, program planning, and improvement. Each provider had its own data system (hardcopy paper, digital or a combination) to collect information on the number of treatment sessions and other summary information. A more systematic and unified system for all treatment providers would ensure that providers have comparable data. Equipping such a data system with a reporting mechanism and training staff to use it properly would allow treatment agencies the ability to engage in data-driven policy and program improvement.
- **Create opportunities for consumers to play a greater role in program evaluation and improvement.** Study participants provided much valuable feedback about what worked and what about their treatment experience could be improved. Incorporating the consumer voice in an impartial and systematic way is a low cost and valuable method to conduct ongoing quality improvement.

> "They go overboard with the amount of classes that some people need. Not everyone needs intensive treatment. They would be better off spending their time and money on the people that need it most."
>
> ~Study Participant

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APPENDIX A: INTAKE INTERVIEW INSTRUMENT

AMH Follow-up Study Interview
(Intake/Baseline)

v. 1.0 1/20/10

A1. Client Name: _____

A2. Interviewer Name: _____

A3. Date of Interview: Month ☐☐ / Day ☐☐ / Year ☐☐

A4. Time Started: ☐☐ : ☐☐ ○ am ○ pm

A5. Time Completed: ☐☐ : ☐☐ ○ am ○ pm

A6. Agency:
- ○ Ontrack
- ○ ChangePoint
- ○ Lifeworks
- ○ ADAPT
- ○ Bestcare
- ○ DePaul
- ○ Yamhill
- ○ CODA
- ○ Cascade Behavioral
- ○ Central City Concern
- ○ Bridgeway Cascadia
- ○ Columbia Mental Health
- ○ Eastern Oregon Alcoholism Foundation
- ○ Addictions Recovery Center Inc.
- ○ Pfeifer and Associates
- ○ Other: _____

A8. Processing Information	Initial	mm/dd/yy
A7a. Checked by interviewer	_____	☐☐/☐☐/☐☐
A7b. Received by coordinator	_____	☐☐/☐☐/☐☐
A7c. Checked by coordinator	_____	☐☐/☐☐/☐☐
A7d. Data entered	_____	☐☐/☐☐/☐☐
A7e. NPC ID: ☐☐☐☐		

NPC ID: ☐☐☐☐

Introduction: Thank you for agreeing to take part in today's interview. The interview will take no more than an hour. The important information you share today will help improve future treatment services. If you need to take a break during the interview, or need a drink of water, please let me know. Are you ready to get started?

It is very important that you answer our questions honestly, so that data will be as valid as possible. There are no right or wrong answers; we just need to know what is true for you, based on your experiences. Remember that this information will be kept confidential and private, as we talked about before.

Also, it is important that I read every question, all the way through, for everyone who participates in our project so that everyone is treated the same way. Sometimes, this will mean I have to read all the way through the answer choices, so please wait until I have read all the possible answers before giving me yours, even if your answer was the first one that I read. Let me know if you have any questions.

First, I have some basic background questions for you.

B1. What is your date of birth? Month ☐☐ / Day ☐☐ / Year ☐☐
[Code 88/88/88 = Refused]

B2. Are you of Hispanic or Latino background?
- ○ Yes
- ○ No
- ○ **Refused**

B3a. How would you describe your racial background; that is, with which groups do you identify? ***[Read each response and mark all that apply]***
- ○ American Indian or Alaska Native
- ○ Asian
- ○ Black or African-American
- ○ Native Hawaiian or other Pacific Islander
- ○ White or Caucasian
- ○ Other [Specify] _____
- ○ **Refused**

B3b. What is the language spoken most often in your home?
- ○ English
- ○ Spanish
- ○ Russian
- ○ Other [Specify] _____
- ○ **Refused**

The next set of questions asks about your household status.

B4. Please tell me all of the places where you have lived in the past 30 days. (ASI LITE)
[Read each and mark all that apply]
- ○ With spouse/partner & children
- ○ With just your spouse/partner
- ○ With children alone
- ○ With parents
- ○ With other family
- ○ With friends
- ○ Alone
- ○ Controlled environment (Residential treatment center, other care facility, nursing home, detox, group home, sober living homes, jail, etc.)
- ○ No stable housing (homeless)
- ○ Other: _____
- ○ **Refused**

B5. Are you satisfied with these living arrangements? (ASI LITE)
- ○ Yes
- ○ No
- ○ Indifferent
- ○ **Refused**

B6. What is your current marital status? (ASI LITE)
{Check only one} {Skip to B8 if response = Never Married)
- ○ Married
- ○ Divorced
- ○ Remarried
- ○ Never Married
- ○ Widowed
- ○ **Refused**
- ○ Separated

B7. How long have you been in this marital status? (ASI LITE)
Yrs. ☐☐ Mos. ☐☐

For the following questions, indicate:

'Y' in relative catagory where the answer is clearly yes for **any** relative within the catagory.

'N' where the answer is clearly no for all relatives in the catagory.

'DK' where the answer is uncertain or "I don't know".

'88' for refused.

B11. Would you say you have had close, long-lasting personal relationships with any of the following people in your life:

a. Mother	O Y O N O DK O 88
b. Father	O Y O N O DK O 88
c. Brothers/Sisters	O Y O N O DK O 88
d. Spouse or Partner	O Y O N O DK O 88
e. Children	O Y O N O DK O 88
f. Friends	O Y O N O DK O 88

B12a. Have you had significant periods in which you have experienced serious problems in getting along with the following people in the **past 30 days**? (ASI LITE)

a. Mother	O Y O N O DK O 88
b. Father	O Y O N O DK O 88
c. Brothers/Sisters	O Y O N O DK O 88
d. Spouse or Partner	O Y O N O DK O 88
e. Children	O Y O N O DK O 88
f. Other significant family	O Y O N O DK O 88
g. Close friends	O Y O N O DK O 88
h. Neighbors	O Y O N O DK O 88
i. Co-workers	O Y O N O DK O 88

B12b. Have you had significant periods in which you have experienced serious problems in getting along with the following people in your **life**? (ASI LITE)

a. Mother	O Y O N O DK O 88
b. Father	O Y O N O DK O 88
c. Brothers/Sisters	O Y O N O DK O 88
d. Spouse or Partner	O Y O N O DK O 88
e. Children	O Y O N O DK O 88
f. Other significant family	O Y O N O DK O 88
g. Close friends	O Y O N O DK O 88
h. Neighbors	O Y O N O DK O 88
i. Co-workers	O Y O N O DK O 88

B13a. In the past 30 days, did any of these people listed above abuse you… (ASI LITE)

a) Emotionally (make you feel bad through harsh words)?
O Yes O No O **Refused**

b) Physcially (cause you physical harm)?
O Yes O No O **Refused**

c) Sexually (force sexual advances or sexual acts)?
O Yes O No O **Refused**

B13b. In your lifetime ,did any of these people listed above abuse you… (ASI LITE)

a) Emotionally (make you feel bad through harsh words)?
O Yes O No O **Refused**

b) Physcially (cause you physical harm)?
O Yes O No O **Refused**

c) Sexually (force sexual advances or sexual acts)?
O Yes O No O **Refused**

B14. How many days in the past 30 have you had serious conflicts: *[If 0 skip B15a-d]*

With your family? ☐☐
With other people (excluding family)? ☐☐

Go to next page

(ASI LITE Family/Social)
SEE SHOW CARD A
[Review show card with client]

	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
B15a. How troubled or bothered have you been in the past 30 days by these family conflicts or problems? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	O	O	O	O	O	O	O	O
B15b. How troubled or bothered have you been in the past 30 days by these conflicts with other people? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	O	O	O	O	O	O	O	O
B15c. How important to you now is treatment or counseling for these family problems? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	O	O	O	O	O	O	O	O
B15d. How important to you now is treatment or counseling for these conflicst with other people? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	O	O	O	O	O	O	O	O

B16. Do you live with anyone who: (ASI LITE)

a. Has a current alcohol problem? O Yes O No O **Refused**

b. Uses non-prescribed drugs? O Yes O No O **Refused**

B17. Have you been at risk for having your children removed from your care due to alcohol and/or drug abuse/dependency issues? {*If no, skip to ?*}
O Yes O No O **Refused** O NA

B18. If yes, do you still have current custody of your children?
O Yes O No O **Refused** O NA

Thank you for answering those questions. The next set of questions are about your employment status.

Employment and Education Questions

E1. What is the highest level of education you have completed? {*Read all responses*} (ASI LITE)

O Less than High School, NO GED
O High School Diploma or passed GED
O Vocational or trade school certification/degree
O Some vocational or trade school
O Two-year Associate degree
O Some college (no degree)
O Four-year college degree (Bachelor's degree) or higher

E2. What was your employment status in the past 30 days?
{*Mark only one; mark any paid employment if several apply*}

O Full time (40 hours/week)
O Part time (regular hours but less than 40 hours/week)
O Part time (irregular hours, day labor; infrequent employment)
O Student (not working)
O Service (volunteer/unpaid work)
O Retired/disability
O Unemployed
O In controlled environment

E3. How many days were you paid for working in the past 30 days? (ASI LITE) [ ][ ] days

E4. How much money did you receive from the following sources in the past **30 days**? (ASI LITE)

a. Employment ("take home pay" -amount after taxes)	$[ ][ ][ ][ ]
b. TANF or welfare/DHS	$[ ][ ][ ][ ]
c. Pension, other benefits or social	$[ ][ ][ ][ ]
d. Money from your spouse/partner, family or friends (money for personal expenses)	$[ ][ ][ ][ ]
e. Illegal	$[ ][ ][ ][ ]
f. Other	$[ ][ ][ ][ ]
g. Other	$[ ][ ][ ][ ]
h. Other	$[ ][ ][ ][ ]

E5. How many people depend on you for the majority of their food, shelter, etc? (ASI LITE) ☐☐
(Do not include self-supporting spouse/partner)

E6. How many days have you experienced employment problems in the past 30 days (such as inability to find work (only if patient has tried to), or problems with present employment (if employment is in jeopardy or unsatisfactory, etc)? (ASI LITE) Estimated number of days: ☐☐

SEE SHOW CARD A	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
E7. How troubled or bothered have you been by these employment problems in the past 30 days? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	○	○	○	○	○	○	○	○
E8. How important to you *now* is counseling for these employment problems? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	○	○	○	○	○	○	○	○

Now, we would like to ask you some questions about your past and current medical status.

MEDICAL STATUS

(Do not include medical problems that would stop if abstinent)

M1. How many times in your life have you been hospitalized overnight for medical problems, not including hospital stays that are just 'detox'? (ASI LITE) *(include o.d.'s, d.t.'s, exclude detox)* Estimated number of times: ☐☐

M2. How long ago was your last hospitalization for a physical problem? (ASI LITE) Years ago: ☐☐

Months ago: ☐☐

M3. Do you have any chronic medical problems that continue to interfere with your life? (ASI LITE)

○ Yes ○ No ○ **Refused**

If yes, specify:_____

M4. Are you taking any prescribed medication on a regular basis for a physical problem? (ASI LITE)

○ Yes ○ No ○ **Refused**

M5. Do you receive a pension for a physical disability (not a mental or psychiatric disability)? (ASI LITE)

○ Yes ○ No ○ **Refused**

If yes, specify:_____

M5b. In the past 30 days, how often have you been treated at an emergency room? ☐☐

M6. In the last 30 days, how many days have you experienced medical problems (include the days on which he/she experienced these problems such as cirrhosis, phlebitis, or pancreatitis, cold or flu)? {*If 0 days, skip M7-M8)* (ASI LITE)

Estimated number of days: ☐☐

(ASI LITE Medical) SEE SHOW CARD A	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
M7. How troubled or bothered have you been by these medical problems in the past 30 days? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	○	○	○	○	○	○	○	○
M8. How important to you *now* is treatment for these medical problems? Would you say, "not at all, slightly, considerably, moderately, or extremely"?	○	○	○	○	○	○	○	○

M9. Are you currently using any type of specific medication-assisted therapy to achieve and/or maintain abstinence (no use) of alcohol and/or illicit drugs? (CalMed CIOM)

- ○ Yes - if yes, specify: _____
- ○ No{***if No, skip to M12***}
- ○ **Refused**

M10. Please tell me which of the statements below describe how you feel about your medication-assisted treatment for your addiction. Please only respond about your medication-assisted treatment and not other types of medication for physical or mental health conditions. (CalMed CIOM)

[Read all responses, ask "Would you say "yes" or "no"? Mark "yes" or "no".]

a. I no longer feel I need my medications:	○ Yes	○ No
b. I would like to change my medications and/or dose:	○ Yes	○ No
c. My medications aren't working for me the way I expected they would:	○ Yes	○ No
d. I use vitamins, herbs, or food supplements:	○ Yes	○ No
e. My medications make me too tired:	○ Yes	○ No
f. My medications make me anxious:	○ Yes	○ No
g. My medications interfere with my sexuality:	○ Yes	○ No
h. My medications make me gain weight:	○ Yes	○ No
i. I cannot affort my medications:	○ Yes	○ No
j. My medications are working fine:	○ Yes	○ No

M11. Please tell me which *one* statement that best describes the way you take your medications. (CalMed CIOM) (choose only one response)

- ○ I always remember to take my medications the way my doctor prescribed
- ○ I take my medications most of the time, but occasionally I forget
- ○ I take my medications until I start to feel better then I stop
- ○ I seldom take my medications
- ○ I never take my medications
- ○ **Refused**

M12. Do you currently smoke or use any tobacco product on a **daily** basis? ○ Yes ○ No ○ **Refused**

The next set of questions have to do with your alcohol and drug use. Again, remember everything you tell me in this interview is confidential.

Drug/Alcohol Use

DA1. How many times in your life have you been treated for Alcohol Abuse? [ ][ ]

DA2. How many times in your life have you been treated for Drug Abuse? [ ][ ]

DA3. How many of these were detox only? (ASI LITE) [ ][ ]

DA4. How much money would you say you spent during the past 30 days on:

a. alcohol $[ ][ ][ ][ ]

b. drugs $[ ][ ][ ][ ]

DA5. How many days have you been treated in an outpatient setting for alcohol or drugs in the past 30 days? [ ][ ]

DA6. If you used alcohol or any illicit or non-prescribed drug in the past 30 days, which of the following describes how you looked for help or support?

{*Read each response and mark yes or no*}

a. I did not seek any support services.
○ Yes ○ No ○ **Refused**

b. I tried to access a self-help group or AA/NA
○ Yes ○ No ○ **Refused**

c. I tried to access treatment at a community oupatient clinic for group and/or individual counseling.
○ Yes ○ No ○ **Refused**

d. I tried to access treatment at a community residential clinic for group and/or individual counseling.
○ Yes ○ No ○ **Refused**

e. I tried to access detoxification services.
○ Yes ○ No ○ **Refused**

f. I tried to access treatment at a local community hospital.
○ Yes ○ No ○ **Refused**

g. I tried to access treatment at a public health clinic.
○ Yes ○ No ○ **Refused**

h. If you tried to access treatment, were you able to get into services? ○ Yes ○ No ○ **Refused**
If no, what was the estimated wait time?
Estimated wait time in days: [ ][ ]

DA7. How often have you attended self help groups (e.g. AA, NA) during the last 30 days? Would you say:

- ○ None
- ○ 1-3 times per month
- ○ 1-2 times per week
- ○ 3-4 times per week
- ○ Daily
- ○ **Refused**

DA8. Which of the following people are currently supportive of your recovery? {*read list, fill in all that apply*}

- ○ Spouse/domestic partner/significant other
- ○ Immediate family (parents, guardians, brothers sisters, daughters, sons)
- ○ Extended family (grandparents, uncles, aunts, cousins)
- ○ Friends
- ○ Roommate/housemate
- ○ Co-worker
- ○ Other, specify:_____
- ○ No one is really supportive of my recovery
- ○ **Refused**

DA9. How many days in the past30 have you experienced Alcohol Problems? (be sure to keep in mind we are interested in the number of days the participant had problems *directly related to using alcohol*) ☐☐ {*If 0, skipDA11*}

DA10. How many days in the past30 have you experienced Drug Problems? (be sure to keep in mind we are interested in the number of days the participant had problems *directly related to drug use*) ☐☐ {*If 0, skipDA12)*}

(ASI LITE) **SEE SHOW CARD A**	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
DA11. How important to you now is treatment for Alcohol Problems?	○	○	○	○	○	○	○	○
DA12. How important to you now is treatment for Drug Problems?	○	○	○	○	○	○	○	○

SUBSTANCE ABUSE QUESTIONS

DA13. In the past 30 days, on how many days have you used? {*read each item a-p, put responses in first column of boxes*}

DA14. In your lifetime, how many years did you use each of the following substances regularly? By "regularly" I mean about 3 times per week for 6 months or more. {*read each item a-p, put responses in second column of boxes*}

DA15. For the following drugs, how do you typically "take-in"or use the drug? {*read each item a-p, put responses in third column of boxes*}; *[INTERVIEWER, code Route of Administration as follows; 1=Oral (by mouth), 2=Nasal (snorting), 3=Smoking, 4=Non IV injection, 5=IV injection. If multiple, code highest number present.]*

	30 days	Lifetime	Admin
a. Alcohol - Any use at all	☐☐ days	☐☐ yrs	
b. Alcohol - to intoxication	☐☐ days	☐☐ yrs	
c. Alcohol - At least one drink	☐☐ days	☐☐ yrs	
d. Alcohol - At least 5 drinks within a few hours	☐☐ days	☐☐ yrs	
e. Heroin*	☐☐ days	☐☐ yrs	☐
f. Methadone	☐☐ days	☐☐ yrs	☐
g. Other opiates/analgesics (morphine)	☐☐ days	☐☐ yrs	☐
h. Barbituates ("downers")	☐☐ days	☐☐ yrs	☐
i. Other sed/hyp/tranq. (roofies)	☐☐ days	☐☐ yrs	☐
j. Cocaine* or Crack	☐☐ days	☐☐ yrs	☐
k. Amphetamines/Methamphetamine	☐☐ days	☐☐ yrs	☐
l. Cannabis (marijuana, pot)	☐☐ days	☐☐ yrs	☐
m. Hallucinogens* (acid, LSD)	☐☐ days	☐☐ yrs	☐
n. Inhalants* (laughing gas, poppers)	☐☐ days	☐☐ yrs	☐
o. Presc. drugs (not for the purpose described)	☐☐ days	☐☐ yrs	☐
p. More than one substance per day (incl. Alcohol)	☐☐ days	☐☐ yrs	☐

DA16. Which substance is the major problem? (choose one)

- ○ Alcohol
- ○ Heroin*
- ○ Methaodne
- ○ Other opiates/analgesics
- ○ Barbituates
- ○ Other sed/hyp/tranq.
- ○ Cocaine* or Crack
- ○ Amphetamines/Methamphetamine
- ○ Cannabis
- ○ Hallucinogens*
- ○ Inhalants*
- ○ Prescription drugs (not for purpose prescribed)
- ○ **Refused**

DA17. How long was your last (most recent) period of voluntary abstinence (not using at all) from this major substance? (ASI LITE)

☐☐ days ☐☐ months ☐☐ years

DA18. How many months ago did this abstinence end? (ASI LITE) ☐☐ months

DA19. In the past 30 days, what is the longest period of time you did not use any alcohol or illicit/non-prescribed drug?

Estimated number of days (or)	☐☐
Estimated number of weeks (or)	☐☐
Estimated number of months	☐☐

DA20. How many times have you had "d.t's" from not using alcohol? (ASI LITE) ☐☐ times

DA21. How many times have you overdosed on drugs? (ASI LITE) ☐☐ times

DA22. Do you currently have a medical marijuana card?

○ Yes ○ No ○ **Refused**

DA23. When I read each statement below, think about how things are going in your life. Tell me which answer best describes how you are feeling right now.

USE SHOW CARD B *[Explain Show Card B to client]*	Disagree	Somewhat Agree	Agree	Strongly Agree
a. I am not likely to use alcohol and/or other drugs	○	○	○	○
b. There is someone who cares about whether I am doing better	○	○	○	○
c. I have someone who will help when I have a problem	○	○	○	○
d. I have people in my life who are a positive influence	○	○	○	○
e. The people I care about are supportive of my recovery	○	○	○	○
f. People count on me to help them when they have a problem	○	○	○	○
g. I have friends who are clean and sober	○	○	○	○
h. I have someone who will listen to me when I need to talk	○	○	○	○
i. Using alcohol and/or drugs is a problem for me	○	○	○	○
j. I need to work on my problems with alcohol and/or drugs	○	○	○	○
k. I am satisfied with the amount of physical activity I get	○	○	○	○
l. My physical health is a concern	○	○	○	○
m. I am getting care for any physical health conerns I have	○	○	○	○
n. Transportation to and from treatment is convenient	○	○	○	○

The next set of questions are about your legal status. Once again, remember everything you tell me on this interview is confidential.

CRIMINAL INFORMATION

CJ1. In the past 30 days, were you a victim of any violent crimes such as assualt, rape, mugging, or robbery?
○ Yes ○ No ○ **Refused** ○ N/A

CJ2. In your lifetime, were you ever the victim of any violent crime such as assualt, rape, mugging, or robbery?
○ Yes
○ No
○ **Refused**

CJ3. In the past 30 days, were you a victim of any nonviolent crimes such as burglary, theft of your property or money, or being cheated?
○ Yes ○ No ○ **Refused** ○ N/A

CJ4. In your lifetime, were you ever the victim of any nonviolent crimes such as burglary, theft of your property or money, or being cheated?
○ Yes
○ No
○ **Refused**

CJ5. How many times in the last 30 days have you been arrested and charged with the following? {*If 0 on all, skip to CJ7*} (modified ASI LITE)

a. Disorderly conduct, vagrancy, public intoxication	☐☐
b. Driving under the influence of intoxicants (DUII)	☐☐
c. Major driving violation (e.g. reckless driving)	☐☐
d. Identity theft	☐☐
e. Shoplifting/vandalism	☐☐
f. Parole/probation violations	☐☐
g. Drug charges	☐☐
h. Forgery	☐☐
i. Weapon offense	☐☐
j. Burglary/larceny/breaking and entering	☐☐
k. Robbery	☐☐
l. Assault	☐☐
m. Arson	☐☐
n. Rape	☐☐
o. Homicide/manslaughter	☐☐
p. Prostitution	☐☐
q. Contempt of court	☐☐
r. Other (specify): _____	☐☐

CJ6. How many of these charges resulted in convictions? (ASI LITE) ☐☐

CJ7. Are you presently awaiting charges, trial, or sentence? (ASI LITE) ○ Yes ○ No ○ **Refused**

CJ8. In the past 30 days, how many days were you detained or incarcerated? ☐☐

CJ9. How long was your last incarceration? ☐☐☐ days

a. What was the reason (most severe charge): _____

CJ10. How many times in your life have you been charged with the following: (ASI LITE)

a. Disorderly conduct, vagrancy, public intoxication ☐☐

b. Driving while intoxicated ☐☐

c. Major driving violations (reckless driving, speeding, no license, etc.) ☐☐

(ASI LITE) **USE SHOW CARD A**	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
CJ11a. How serious do you feel your present legal problems are? (NOT including civil court problems such as child welfare, evictions, etc.)	○	○	○	○	○	○	○	○
CJ11b. How important to you *now* is counseling or referral for these legal problems?	○	○	○	○	○	○	○	○

CJ12. Have you been in any controlled living environment (such as jail or residential treatment) in the past 30 days? {*if no, skip to CJ?)* (ASI LITE)

- O No
- O Jail
- O Alcohol or Drug Treatment
- O Psychiatric Treatment
- O Other (specify): _____
- O **Refused**

CJ13. How many days were you in this living situation (out of the past 30 days)? (ASI LITE)

Estimated number of days: ☐☐

CJ14. Are you currently on probation or parole?

O Yes O No O **Refused**

CJ15. How many days in the past 30 have you engaged in illegal activities for profit (to make money)? (ASI LITE) Estimated number of days: ☐☐

CJ16. Thinking about the treatment you are beginning right now, was this treatment ordered or suggested by criminal or family court?

- O Yes, criminal court (DUII, drug court, or other)
- O Yes, family court (child welfare)
- O No
- O **Refused**

If yes, are you participating in a treatment court program (drug court, DUI court, or family drug court)?

O Yes O No O **Refused**

The next set of questions ask about psychological status.

P1. Have you had a significant period of time **within the last 30 days** (that was not a direct result of alcohol/drug use) in which you have *[see table below, read each item, record yes or no; do not code if condition only occurs while client is using substances]:* (ASI LITE)

P2. Have you had a significant period of time **in your lifetime** (that was not a direct result of alcohol/drug use) in which you have *[see table below, read each item, record yes or no; do not code if condition only occurs while client is using substances]:* (ASI LITE)

	Past 30 Days	**Lifetime**
a. Experienced serious depression - sadness, hopelessness, loss of interest, difficulty with daily function?	O Yes O No O **Refused**	O Yes O No O **Refused**
b. Experienced serious anxiety/tension -- feeling unreasonably worried, inability to feel relaxed?	O Yes O No O **Refused**	O Yes O No O **Refused**
c. Experienced hallucinations - saw things or heard voices that were not there?	O Yes O No O **Refused**	O Yes O No O **Refused**
d. Experienced trouble understanding, concentrating, or remembering?	O Yes O No O **Refused**	O Yes O No O **Refused**
e. Experienced trouble controlling violent behavior, including episodes of rage or violence?	O Yes O No O **Refused**	O Yes O No O **Refused**
*f. Experienced serious thoughts of suicide? (seriously considered a plan for taking your life)	O Yes O No O **Refused**	O Yes O No O **Refused**
*g. Attempted suicide? (doing suicidal gestures or attempts)	O Yes O No O **Refused**	O Yes O No O **Refused**
h. Been prescribed medication for any psychological or emtional problems? (prescribed by an MD and/or psychiatric)	O Yes O No O **Refused**	O Yes O No O **Refused**

**NOTE: If serious current suicide risk is present, please contact NPC and your supervisor*

P3. How many days in the past 30 have you experienced these psychological or emotional problems? (ASI LITE) ☐☐

{If 0, skip to P6}

(ASI LITE) **USE SHOW CARD A**	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
P4. How much have you been troubled or bothered by the psychological or emotional problems described above in the past 30 days?	○	○	○	○	○	○	○	○
P5. How important to you now is treatment for these psychological problems?	○	○	○	○	○	○	○	○

P6. How many times in your life have you been treated for any psychological or emotional problems? (ASI LITE)

a. In a hospital	☐☐
b. As an outpatient or in private individual treatment	☐☐

P7. Do you receive a pension for a psychiatric disability? (ASI LITE) ○ Yes ○ No ○ **Refused**

Thank you for answering those questions for us today. Do you have anything else to tell me about yourself or your situation?

Okay, that completes the interview. Remember, like we talked about, someone from NPC will be contacting you to do another interview like this in about 6 months. Thank you for agreeing to be in this important study!

Please use the back of this page for notes or comments.

INTERVIEWER PLEASE COMPLETE: The remaining items on this page are NOT TO BE ASKED OF THE CLIENT, but are to be completed by the interviewer.

I1. At the time of the interview, is client: (ASI LITE)

a. Obviously depressed/withdrawn	○ Yes ○ No
b. Obviously hostile	○ Yes ○ No
c. Obviously anxious/nervous	○ Yes ○ No
d. Having trouble with reality testing, thought disorders, paranoid thinking	○ Yes ○ No
e. Having trouble comprehending, concentrating, remembering	○ Yes ○ No
f.Having suicidal thoughts	○ Yes ○ No

Appendix B: 6-Month Follow-Up Interview Instrument

AMH Follow-up Study Interview
(6-Month Follow Up Interview Form)

Last date of contact with client: _____

A7e. ID ☐☐☐☐

A1. Client Name: _____

A2. Interviewer: _____

A3. Date of Interview: Month ☐☐ / Day ☐☐ / Year ☐☐

A4. Time Started: ☐☐ : ☐☐ ○ am ○ pm

A5. Time Completed: ☐☐ : ☐☐ ○ am ○ pm

A7. Date of baseline Interview: Month ☐☐ / Day ☐☐ / Year ☐☐

A6. Name of Referring Agency *(source of referral to study)*:_____

A8. Was this interview *[the 6-month interview]* conducted in-person or on the phone?

○ In-Person

○ Phone

A8. Processing	Initial	mm/dd/yy
A8a. Recorded in database by interviewer	_____	☐☐/☐☐/☐☐
A8b. Gift card given/sent to participant	_____	☐☐/☐☐/☐☐
A7b. Received by coordinator	_____	☐☐/☐☐/☐☐
A7c. Checked by coordinator	_____	☐☐/☐☐/☐☐
A7d. Scanned by coordinator	_____	☐☐/☐☐/☐☐

[Note to data collector: please remember to review the AMH database to see if 3 month questions have been answered and, if so, to log them here before the interview starts. The question about whether they are currently in treatment needs to be asked again, even if it was answered at 3 months]

NPC ID: ☐☐☐☐

Thanks again for agreeing to participate in this study. It is the first study of its kind in Oregon, and the results will be really important to helping improve treatment services and keep them funded. The study wouldn't be possible without your help. The interview should take about half an hour.

Anything you tell me today will be kept private. The only exceptions to privacy would be if we (1) saw that there was a medical emergency; (2) heard statements indicating that you are planning to harm yourself or others or (3) observed child abuse.

There are no right or wrong answers; we just need to know what is true for you, based on your experiences. Again, this information will be kept private.

Also, it is important that I read every question, all the way through, for everyone who participates in our project so that everyone is treated the same way. Are you ready to get started?

---

1. Are you still receiving substance abuse treatment at *[name of referral agency]?*

O Yes ***[If yes, skip to 2]***
O No

1a. Are you receiving treatment anywhere else right now?

O No - study participant is not receiving treatment anywhere else right now. ***[If no, skip to 2]***
O Yes

1aa. Do you know the name of the agency?

O No - study participant does not know the name of the agency. ***[If no, skip to1b]***
O Yes

1ab. What is the name of the agency? _____

1b. What is the name of the counselor that you are working with there?_____

[Interviewer note: Don't ask the client for agency contact info.]

1c. May we have permission to contact that agency if we need to locate you to schedule an interview?

O Yes *[Record this in the "releases" section of the database AND in the "additional notes" section of the database]*
O No - NPC does not have permission. *[Add a note that we do not have permission to contact new agency in the "additional notes" section of the database]*

[note, skip to B4 if 2 & 3 were asked at 3 months call]

2. When you first agreed to participate in this study (that is, when you started at *[name of referral agency*] can you tell me if you were going there to receive inpatient services or outpatient services?

O Inpatient or Day Treatment *[note: inpatient = residential, spending the night there]*
O Outpatient *[includes OP, Intensive OP, day treatment and DUI education]*

3. Ok, now can you tell me when you were receiving treatment at *[name of referral agency]*, was this part of required treatment because of a DUI *[driving under the influence]* case? O Yes O No

The next set of questions asks about your household status. *[Read each response]*

B4. Please tell me all of the places where you have lived in the past 30 days - since about *[let the participant know what the date was 30 days ago]*. *(modified ASI LITE)*

[Read each response and mark all that apply]

- O With spouse/partner & children
- O With just your spouse/partner
- O With children alone
- O With parents
- O With family
- O With friends
- O Alone
- O Controlled environment (Residential treatment center, other care facility, nursing home, detox, group sober living homes, jail, etc.)
- O No stable housing (homeless)
- O Other: _____
- O Refused

B16. Did you live with anyone who in the past 30 days : *(ASI LITE)*

a. Has a current alcohol problem? O Yes O No O Refused

b. Uses non-prescribed drugs? O Yes O No O Refused

B17. Have you been at risk for having your children removed from your care due to alcohol and/or drug abuse/dependency issues? *[Here's an example you can read to the participant: has your family been investigated because of reports to child welfare in the past 30 days?]*

- O Yes
- O No ***[If no, mark NA for the next 3 questions and then skip to E2]***
- O Refused
- O NA ***[If NA, mark NA for the next 3 questions and then skip to E2]***

B18. If yes, do you still have current custody of your children? O Yes O No O Refused O NA

B19. Did you meet the child welfare service agreement during treatment to progress towards regaining custody of your children?

- O Yes
- O No/Not Yet ***[If no, mark NA for the next question and then skip to E2]***
- O Refused
- O NA

B19a. Have you had your children returned to you since you have met the child welfare service agreement?

O Yes O No O Refused O NA

Thank you for answering those questions. The next set of questions is about your employment status.

E2. What was your employment status in the past 30 days? ***[only mark one - the highest level]***

- O Full time (40 hours/week)
- O Part time (regular hours but less than 40 hours/week)
- O Part time (irregular hours, day work)
- O Student (not working)
- O Service (volunteer/unpaid work)
- O Retired/disability
- O Unemployed
- O In controlled environment

E3. How many days were you paid for working in the past 30 days, including "under-the-table" work? *(ASI LITE)*

☐☐ days

E4. How much money did you receive from the following sources in the past 30 days *[read response options]*? *(ASI LITE)*

a. Employment ("take home pay"- amount after taxes)	$
b. Unemployment compensation	$
c. TANF or welfare/DHS payments/Food Stamps	$
d. Pension, other benefits, social security, disability or child support	$
e. Money from your spouse/partner, family or friends (money for personal expenses)	$
f. Illegal sources	$
g. Other (specify):	$
h. Other (specify):	$
i. Other (specify):	$

E5. How many people depend on you for the majority of their food, shelter, etc? *[does not include self or self-supporting spouse/partner)* *(ASI LITE)* Estimated number of people:

E9. During the past 30 days, has someone else contributed the majority of your financial support *[more than 50%]*? *(ASI LITE)* ○ Yes ○ No ○ Refused ○ NA

The next set of questions have to do with your alcohol and drug use. Again, remember everything you tell me in this interview is confidential.

DA4. How much money would you say you spent during the past 30 days on: a. alcohol $

b. drugs $

DA6. In the past 30 days, which of the following are true for you? (*Read each response and mark yes or no)*

b. I tried to access a self-help group or AA/NA.	○ Yes ○ No ○ Refused
c. I tried to access A & D treatment at a community outpatient clinic for group and/or individual counseling.	○ Yes ○ No ○ Refused
d. I tried to access A & D treatment at a community residential clinic for group and/or individual counseling.	○ Yes ○ No ○ Refused
e. I tried to access detoxification services.	○ Yes ○ No ○ Refused
f. I tried to access A & D treatment at a local community hospital.	○ Yes ○ No ○ Refused
g. I tried to access A & D treatment at a public health clinic.	○ Yes ○ No ○ Refused
h. If you tried to access A & D treatment, were you able to get into services? *[if they tried accessing 2+ places, and got into any of them, it is a "yes"]*	○ Yes ○ No ○ Refused ○ NA

[if yes, skip to DA7]

If no, what was the estimated wait time? *[if they tried accessing 2+ places, waiting time should be the shortest]*

Estimated wait time in days:

DA7. How often have you attended self help groups (e.g. AA, NA) during the last 30 days? Would you say:

- O None
- O 1-3 times per month
- O 1-2 times per week
- O 3-4 times per week
- O Daily
- O Refused

DA9. How many days in the past 30 have you experienced Alcohol Problems? *[be sure to keep in mind we are interested in the number of days the participant had problems directly related to their use. Problems may inlcude cravings, withdrawal symptoms, wanting to stop using, but not being able to stop; social or legal consequences, such as DUIIs/court consequences, family members upset with use; and emotion consequences as a result of their use]* [ ][ ] days

DA10. How many days in the past 30 have you experienced Drug Problems? *[be sure to keep in mind we are interested in the number of days the participant had problems directly related to drug use]* [ ][ ] days

DA13. In the past 30 days, on how many days have you used? *[make sure to read each item (b-p) below, and allow the participant to answer after reading each item]*

	Number of Days
b. Alcohol - to intoxication (feeling "buzzed" or "high")	[ ][ ]
c. Alcohol - At least one drink	[ ][ ]
d. Alcohol - At least 5 drinks within a few hours	[ ][ ]
e. Heroin (Lady, white girl, horse, black tar, brown sugar, smack, goods, H, junk, Harry)*	[ ][ ]
f. Methadone (Dolophine, LAAM)	[ ][ ]
g. Other opiates/pain killers (e.g., Morphine {M, white stuff, cube, morf, mud, nasty}, Dilaudid, Demerol, Percocet, Oxycontin, Ocycodone, Darvon, Talwin, Codeine, Tylenol 2, 3, 4, Syrups, Robitussin, Fentanyl)	[ ][ ]
h. Barbituates (Nembutal, Seconal, Tuinol, Amytal, Pentobarbital, Secobarbital, Phenobarbital, Fiorinol)	[ ][ ]
i. Other sedatives or tranquilizers (Benzodiazepines: Valium, Xanax, Librium, Ativan, Serax, Quaaludes, Tranxene, Dalmane, Halcion, Miltown)	[ ][ ]
j. Cocaine* or Crack (Cocaine Crystal, Free-Base Cocaine or "Crack" and "Rock")	[ ][ ]
k. Amphetamines/Methamphetamine (Monster, Crank, Benzedrine, Dexedrine, Ritalin, Preludin, Methamphetamine, Speed, Ice, Crystal)	[ ][ ]
l. Cannabis *[The intent is to get at use of substances not for their intended purpose. If the marijuana is being legally prescribed and used for its intended purpose then it would not be counted here.]*	[ ][ ]
m. Hallucinogens* (LSD (acid), Mescaline, Mushrooms (Psilocybin), Peyote, Green, PCP (Phenocyclidine), Angel Dust, Ecstasy)	[ ][ ]
n. Inhalants* (Nitrous Oxide, Amyl Nitrate, Whippits, Poppers, Glue, Solvents, Gasoline, Toluene)	[ ][ ]
o. Prescription drugs (not for the purpose prescribed)	[ ][ ]
p. More than one substance per day (including Alcohol)	[ ][ ]

DA19. In the past 30 days, what is the longest period of time you did not use any alcohol or illicit/non-prescribed drug? Estimated number of days: [ ][ ][ ][ ]

DA23. When I read each statement below, think about how things are going in your life. Tell me which answer best describes how you are feeling **RIGHT NOW.**

USE SHOW CARD B	Disagree	Somewhat Agree	Agree	Strongly Agree
a. I am not likely to use alcohol and/or other drugs	O	O	O	O
b. There is someone who cares about whether I am doing better	O	O	O	O
c. I have someone who will help when I have a problem	O	O	O	O
d. I have people in my life who are a positive influence	O	O	O	O
e. The people I care about are supportive of my recovery	O	O	O	O
f. People count on me to help them when they have a problem	O	O	O	O
g. I have friends who are clean and sober	O	O	O	O
h. I have someone who will listen to me when I need to talk	O	O	O	O
i. Using alcohol and/or drugs is a problem for me	O	O	O	O
j. I need to work on my problems with alcohol and/or drugs	O	O	O	O
o. I am less bothered by my symptoms (of substance abuse)	O	O	O	O
p. I am better able to cope when things go wrong	O	O	O	O
q. I am better able to accomplish the things I want to do	O	O	O	O
r. I am making progress in my wellness/recovery goals	O	O	O	O
s. I am doing well in my wellness/recovery goals	O	O	O	O
t. The wellness/recovery tools and skills that I use are effective for me	O	O	O	O

DA24. When you started participating in this study, you were receiving treatment from *[referral agency name]*. Thinking about the treatment that you received there - or your most recent treatment experience - please tell me whether you disagree, somewhat agree, agree, or strongly agree with each statement I am about to read.

u. When I needed services right away, I was able to see someone as soon as I wanted	O	O	O	O
v. The people I go to (went to) for services spent enough time with me	O	O	O	O
w. I helped to develop my service and treatment goals	O	O	O	O
x. The people I went to for services were sensitive to my cultural background (race, ethnicity, religion, sexual orientation)	O	O	O	O
y. I was given information about different services that were available to me	O	O	O	O
z. I was given enough information to effectively handle my problems	O	O	O	O
n. Transportation to and from treatment is (or was) convenient	O	O	O	O

M9. Are you currently using any type of specific medication-assisted therapy to achieve and/or maintain abstinence (no use) of alcohol and/or illicit drugs? *[examples: Anabuse, Naltrexone (Revia or Vivitrol), Acamprosate, Bupreonorphine (Suboxonel)] (CalMed CIOM)*

O Yes - If yes, specify:_____

O No **[if No, skip to M12]**

O Refused

M10. Please tell me which of the statements below describe how you feel about your medication-assisted treatment for your addiction. Please only respond about your medication-assisted treatment and not other types of medication for physical or mental health conditions. *(CalMed CIOM)*

[Read all responses, ask "Would you say "yes" or "no"? Mark all items that the participant agrees with.]

a. I no longer feel I need my medications	O Yes	O No
b. I would like to change my medications and/or dose	O Yes	O No
c. My medications aren't working for me the way I expected they would	O Yes	O No
d. I use vitamins, herbs, or food supplements	O Yes	O No
e. My medications make me too tired	O Yes	O No
f. My medications make me anxious	O Yes	O No
g. My medications interfere with my sexuality	O Yes	O No
h. My medications make me gain weight	O Yes	O No
i. I cannot afford my medications	O Yes	O No
j. My medications are working fine	O Yes	O No

M11. Please tell me which *one* statement that best describes the way you take your medications. *(CalMed CIOM)* *[choose only one response]*

O I always remember to take my medications the way my doctor prescribed

O I take my medications most of the time, but occasionally I forget

O I take my medications until I start to feel better then I stop

O I seldom take my medications

O I never take my medications

O Refused

M12. Do you currently smoke or use any tobacco product on a **daily** basis? O Yes O No O Refused

The next set of questions are about your criminal justice status. Once again, remember everything you tell me on this interview is confidential.

CJ1. In the past 30 days, were you a victim of any violent crimes such as assualt, rape, mugging, or robbery? O Yes O No O Refused O N/A

CJ3. In the past 30 days, were you a victim of any nonviolent crimes such as burglary, theft of your property or money, or being cheated?

O Yes O No O Refused O N/A

CJ5a. Have you been arrested and charged for any offense in the past 30 days? This includes things like major driving violations, contempt of court, disorderly condunt, probation/parole violations, as well as any other type of offense?

O Yes

O No **[if No, skip to CJ8]**

O Refused **[if refused, skip to CJ8]**

CJ5. How many times in the last 30 days have you been arrested and charged with the following? *[If 0 on all, skip to CJ8] (modified ASI LITE)*

a. Disorderly conduct, vagrancy, public intoxication	☐☐
b. Driving under the influence of intoxicants (DUII)	☐☐
c. Major driving violation (e.g. reckless driving)	☐☐
d. Identity theft	☐☐
e. Shoplifting/vandalism	☐☐
f. Parole/probation violations	☐☐
g. Drug charges	☐☐
h. Forgery	☐☐
i. Weapon offense	☐☐
j. Burglary/larceny/breaking and entering	☐☐
k. Robbery	☐☐
l. Assault	☐☐
m. Arson	☐☐
n. Rape	☐☐
o. Homicide/manslaughter	☐☐
p. Prostitution	☐☐
q. Contempt of court	☐☐
r. Other _____	☐☐

CJ6. How many of these charges resulted in convictions? *(ASI LITE)* ☐☐

CJ8. In the past 30 days, how many days were you detained or incarcerated? *(modified ASI LITE)* ☐☐ days

CJ12. Have you been in any controlled living environment (such as jail or residential treatment) in the past 30 days? *[mark all that apply]* *(ASI LITE)*

- O No
- O Jail
- O Alcohol or Drug Treatment
- O Psychiatric Treatment
- O Other *[this includes sober house]* (specify):_____
- O Refused

The next set of questions ask about psychological status.

P1. Have you had a significant period of time within the last 30 days (that was not a direct result of alcohol/drug use) in which you have: *[see table below, read each item, record yes or no]* *(ASI LITE)*

a. Experienced serious depression - sadness, hopelessness, loss of interest, difficulty with daily function?	O Yes O No O Refused
b. Experienced serious anxiety/tension -- feeling unreasonably worried, inability to feel relaxed?	O Yes O No O Refused
c. Experienced hallucinations - saw things or heard voices that were not there?	O Yes O No O Refused
d. Experienced trouble understanding, concentrating, or remembering?	O Yes O No O Refused
e. Experienced trouble controlling violent behavior, including episodes of rage or violence?	O Yes O No O Refused
*f. Experienced serious thoughts of suicide? (seriously considered a plan for taking your life)	O Yes O No O Refused
*g. Attempted suicide? (doing suicidal gestures or attempts)	O Yes O No O Refused
h. Been prescribed medication for any psychological or emotional problems? (prescribed by an MD and/or psychiatrist)	O Yes O No O Refused

P3. How many days in the past 30 have you experienced these psychological or emotional problems? *(ASI LITE)*

☐☐ days ***[If 0, mark P4 as NA and go to S1]***

(ASI LITE) **USE SHOW CARD A**	Not at all	Slightly	Considerably	Moderately	Extremely	Don't know	Refused	N/A
P4. How much have you been troubled or bothered by the psychological or emotional problems described above in the past 30 days?	O	O	O	O	O	O	O	O

Thank you for answering those difficult questions. Now, I just have a few remaining questions to close our interview.

Final Questions

S1. Please tell us anything you think is important for us to know about the services you received from *[name of referral agency].*

S2. Are there any services or supports that you think would have helped you that you did not receive?

S3. What was the most helpful service or support that you received from *[name of referral agency]*?

Can you tell me if any of your contact information has changed? [*This information should be kept on a separate sheet of paper, entered in the database after the interview, and then shredded].*

I2. Is there important clarifying information that should be included?

INTERVIEWER PLEASE COMPLETE: The remaining items on this page are NOT TO BE ASKED OF THE CLIENT, but are to be completed by the interviewer.

I1. At the time of the interview, is client: (ASI LITE)

a. Obviously depressed/withdrawn	O Yes O No
b. Obviously hostile	O Yes O No
c. Obviously anxious/nervous	O Yes O No
d. Having trouble with reality testing, thought disorders, paranoid thinking	O Yes O No
e. Having trouble comprehending, concentrating, remembering	O Yes O No
f. Having suicidal thoughts - [mandated reporting trigger]	O Yes O No

APPENDIX C: 12-MONTH FOLLOW-UP INTERVIEW INSTRUMENT

AMH Follow-up Study Interview
(12-Month Follow Up Interview Form)

Version 3

A7e. ID ☐☐☐☐

A1. Client Name: _____

A2. Interviewer: _____

A3. Date of Interview: Month ☐☐ / Day ☐☐ / Year ☐☐

A4. Time Started: ☐☐ : ☐☐ ○ am ○ pm

A5. Time Completed: ☐☐ : ☐☐ ○ am ○ pm

A7. Date of baseline Interview: Month ☐☐ / Day ☐☐ / Year ☐☐

A9. Was 6-month interview completed? ○ Yes ○ No

A6. Name of Referring Agency *(source of referral to study)*:_____

A8. Was this interview *[the 12-month interview]* conducted in-person or on the phone?

○ In-Person

○ Phone

A8. Processing	Initial	mm/dd/yy
A8a. Recorded in database by interviewer	_____	☐☐/☐☐/☐☐
A8b. Gift card given/sent to participant	_____	☐☐/☐☐/☐☐
A7b. Received by coordinator	_____	☐☐/☐☐/☐☐
A7c. Checked by coordinator	_____	☐☐/☐☐/☐☐
A7d. Scanned by coordinator	_____	☐☐/☐☐/☐☐

[Note to data collector: please remember to review the AMH database to see if 3 month questions have been answered IF THIS PERSON DID NOT COMPLETE 6M INTERVIEW and, if so, to log them here before the interview starts. The question about whether they are currently in treatment needs to be asked again, even if it was answered at 3 or 6 months]

Thanks again for agreeing to participate in this study. It is the first study of its kind in Oregon, and the results will be really important to helping improve treatment services and keep them funded. The study wouldn't be possible without your help. The interview should take about half an hour.

Anything you tell me today will be kept private. The only exceptions to privacy would be if we (1) saw that there was a medical emergency; (2) heard statements indicating that you are planning to harm yourself or others or (3) observed child abuse.

There are no right or wrong answers; we just need to know what is true for you, based on your experiences. Again, this information will be kept private.

Also, it is important that I read every question, all the way through, for everyone who participates in our project so that everyone is treated the same way. Are you ready to get started?

---

1. Are you still receiving substance abuse treatment at *[name of referral agency]?*

O Yes ***[If yes, skip to 2]***
O No

1a. Are you receiving treatment anywhere else right now?

O No - study participant is not receiving treatment anywhere else right now. ***[If no, skip to 2]***
O Yes

2. When you first agreed to participate in this study (that is, when you started at *[name of referral agency*] can you tell me if you were going there to receive inpatient services or outpatient services?

O Inpatient or Day Treatment *[note: inpatient = residential, spending the night there]*
O Outpatient *[includes OP, Intensive OP, day treatment and DUI education]*

3. Ok, now can you tell me when you were receiving treatment at *[name of referral agency]*, was this part of required treatment because of a DUI *[driving under the influence]* case? O Yes O No

---

The next set of questions asks about your housing status. *[Read each response]*

B4. Who have you lived with over the past 30 days? - since about *[let the participant know what the date was 30 days ago]*. *(modified ASI LITE)*

[Read each response and mark all that apply] *[Cross check with CJ12]*

O With spouse/partner & children
O With just your spouse/partner
O With children alone
O With parents
O With family
O With friends
O Alone
O Controlled environment (Residential treatment center, other care facility, nursing home, detox, group sober living homes, jail, etc.)
O No stable housing (homeless)
O Other: _____
O Refused

B4a. In the past 30 days, where have you been living most of the time? *[DO NOT READ RESPONSE OPTIONS TO CLIENT.]*

- ○ Shelter (Save Havens, transitional living center (TLC), low demand facilities, reception centers, other temporary day or evening facility)
- ○ Street/Outdoors (Sidewalk, doorway, park, public or abandoned building)
- ○ Institution (Hospital, nursing home, jail/prison)
- ○ Housed*: [IF HOUSED, CHECK APPROPRIATE SUBCATEGORY]*
  - ○ Own/Rent apartment, room, or house
  - ○ Someone else's apartment, room or house
  - ○ Halfway house
  - ○ Residential treatment
  - ○ Other housed (specify): _____
  - ○ Refused
  - ○ Don't Know

B16. Did you live with anyone who in the past 30 days : *(ASI LITE)*

a. Has a current alcohol problem? ○ Yes ○ No ○ Refused

b. Uses non-prescribed drugs? ○ Yes ○ No ○ Refused

Thank you for answering those questions. The next set of questions is about your employment status.

E2. What was your employment status in the past 30 days? ***[only mark one - the highest level]***

- ○ Full time (40 hours/week)
- ○ Part time (regular hours but less than 40 hours/week)
- ○ Part time (irregular hours, day work)
- ○ Student (not working)
- ○ Service (volunteer/unpaid work)
- ○ Retired/disability
- ○ Unemployed
- ○ In controlled environment

E3. How many days were you paid for working in the past 30 days, including "under-the-table" work? *(ASI LITE)*

☐☐ days

E4. How much money did you receive from the following sources in the past 30 days *[read response options]*? *(ASI LITE)*

a. Employment ("take home pay"- amount after taxes)	$☐☐☐☐
b. Unemployment compensation	$☐☐☐☐
c. TANF or welfare/DHS payments/Food Stamps	$☐☐☐☐
d. Pension, other benefits, social security, disability or child support	$☐☐☐☐
e. Money from your spouse/partner, family or friends (money for personal expenses)	$☐☐☐☐
f. Illegal sources	$☐☐☐☐
g. Other (specify):	$☐☐☐☐
h. Other (specify):	$☐☐☐☐
i. Other (specify):	$☐☐☐☐

E5. How many people depend on you for the majority of their food, shelter, etc? *[does not include self or self-supporting spouse/partner)* *(ASI LITE)* Estimated number of people: ☐☐

E9. During the past 30 days, has someone else contributed the majority of your financial support *[more than 50%]*? *(ASI LITE)* ○ Yes ○ No ○ Refused ○ NA

The next set of questions have to do with your alcohol and drug use. Again, remember everything you tell me in this interview is confidential.

DA4. How much money would you say you spent during the past 30 days on: a. alcohol $ ☐☐☐☐

b. drugs $ ☐☐☐☐

DA9. How many days in the past 30 have you experienced Alcohol Problems? *[be sure to keep in mind we are interested in the number of days the participant had problems directly related to their use. Problems may inlcude cravings, withdrawal symptoms, wanting to stop using, but not being able to stop; social or legal consequences, such as DUIIs/court consequences, family members upset with use; and emotion consequences as a result of their use]* ☐☐ days

DA10. How many days in the past 30 have you experienced Drug Problems? *[be sure to keep in mind we are interested in the number of days the participant had problems directly related to drug use]* ☐☐ days

DA13. In the past 30 days, on how many days have you used? *[make sure to read each item (b-p) below, and allow the participant to answer after reading each item]*

	Number of Days
b. Alcohol - to intoxication (feeling "buzzed" or "high")	☐☐
c. Alcohol - At least one drink	☐☐
d. Alcohol - At least 5 drinks within a few hours	☐☐
l. Cannabis *[The intent is to get at use of substances not for their intended purpose. If the marijuana is being legally prescribed and used for its intended purpose then it would not be counted here.]*	☐☐
k. Amphetamines/Methamphetamine (Monster, Crank, Benzedrine, Dexedrine, Ritalin, Preludin, Methamphetamine, Speed, Ice, Crystal)	☐☐
e. Heroin (Lady, white girl, horse, black tar, brown sugar, smack, goods, H, junk, Harry)*	☐☐
f. (Non-Prescribed) Methadone (Dolophine, LAAM)	☐☐
g. Other opiates/pain killers (e.g., Morphine {M, white stuff, cube, morf, mud, nasty}, Dilaudid, Demerol, Percocet, Oxycontin, Ocycodone, Darvon, Talwin, Codeine, Tylenol 2, 3, 4, Syrups, Robitussin, Fentanyl)	☐☐
h. Barbituates (Nembutal, Seconal, Tuinol, Amytal, Pentobarbital, Secobarbital, Phenobarbital, Fiorinol)	☐☐
i. Other sedatives or tranquilizers (Benzodiazepines: Valium, Xanax, Librium, Ativan, Serax, Quaaludes, Tranxene, Dalmane, Halcion, Miltown)	☐☐
j. Cocaine* or Crack (Cocaine Crystal, Free-Base Cocaine or "Crack" and "Rock")	☐☐
m. Hallucinogens* (LSD (acid), Mescaline, Mushrooms (Psilocybin), Peyote, Green, PCP (Phenocyclidine), Angel Dust, Ecstasy)	☐☐
n. Inhalants* (Nitrous Oxide, Amyl Nitrate, Whippits, Poppers, Glue, Solvents, Gasoline, Toluene)	☐☐
o. Prescription drugs (not for the purpose prescribed)	☐☐
p. More than one substance per day (including Alcohol)	☐☐

M12. Do you currently smoke or use any tobacco product on a **daily** basis? O Yes O No O Refused

DA19. In the past 30 days, what is the longest period of time you did not use any alcohol or illicit/non-prescribed drug? Estimated number of days: ☐☐☐☐

DA7. How often have you attended self help groups (e.g. AA, NA) during the last 30 days? Would you say:
O None O 1-3 times per month O 1-2 times per week O 3-4 times per week O Daily O Refused

DA6. In the past 30 days, which of the following are true for you? (*Read each response and mark yes or no)*

b. I tried to access a self-help group or AA/NA.	O Yes O No O Refused
c. I tried to access A & D treatment at a community outpatient clinic for group and/or individual counseling.	O Yes O No O Refused
d. I tried to access A & D treatment at a community residential clinic for group and/or individual counseling.	O Yes O No O Refused
e. I tried to access detoxification services.	O Yes O No O Refused
f. I tried to access A & D treatment at a local community hospital.	O Yes O No O Refused
g. I tried to access A & D treatment at a public health clinic.	O Yes O No O Refused
h. If you tried to access A & D treatment, were you able to get into services? *[if they tried accessing 2+ places, and got into any of them, it is a "yes"]*	O Yes O No O Refused O NA

[if yes, skip to DA7]

If no, what was the estimated wait time? *[if they tried accessing 2+ places, waiting time should be the shortest]*
Estimated wait time in days: ☐☐

DA23. When I read each statement below, think about how things are going in your life. Tell me which answer best describes how you are feeling **RIGHT NOW.**

USE SHOW CARD B

	Disagree	Somewhat Agree	Agree	Strongly Agree
a. I am not likely to use alcohol and/or other drugs	O	O	O	O
b. There is someone who cares about whether I am doing better	O	O	O	O
c. I have someone who will help when I have a problem	O	O	O	O
d. I have people in my life who are a positive influence	O	O	O	O
e. The people I care about are supportive of my recovery	O	O	O	O
f. People count on me to help them when they have a problem	O	O	O	O
g. I have friends who are clean and sober	O	O	O	O
h. I have someone who will listen to me when I need to talk	O	O	O	O
i. Using alcohol and/or drugs is a problem for me	O	O	O	O
j. I need to work on my problems with alcohol and/or drugs	O	O	O	O
r. I am making progress in my wellness/recovery goals	O	O	O	O
s. I am doing well in my wellness/recovery goals	O	O	O	O
t. The wellness/recovery tools and skills that I use are effective for me	O	O	O	O

DA24. When you started participating in this study, you were receiving treatment from *[referral agency name]*. Thinking about the treatment that you received there please tell me whether you disagree, somewhat agree, agree, or strongly agree with each statement I am about to read.

	Disagree	Somewhat Agree	Agree	Strongly Agree
u. When I needed services right away, I was able to see someone as soon as I wanted	O	O	O	O
v. The people I go to (went to) for services spent enough time with me	O	O	O	O
w. I helped to develop my service and treatment goals	O	O	O	O
x. The people I went to for services were sensitive to my cultural background (race, ethnicity, religion, sexual orientation)	O	O	O	O
y. I was given information about different services that were available to me	O	O	O	O
z. I was given enough information to effectively handle my problems	O	O	O	O
n. Transportation to and from treatment is (or was) convenient	O	O	O	O

M6. In the last 30 days, how many days have you experienced medical problems? (include the days on which he/she experienced these problems such as cirrhosis, phlebitis, or pancreatitis, cold or flu) *[If 0 days, skip to M9]*

Estimated number of days: [ ][ ][ ][ ]

M7. How troubled or bothered have you been by these medical problems in the past 30 days? Would you say, "not at all, slightly, considerably, moderately, or extremely?"

- O Not at all
- O Slightly
- O Considerably
- O Moderately
- O Extremely
- O Don't know
- O Refused
- O N/A

M9. Are you currently using any type of specific medication-assisted therapy to achieve and/or maintain abstinence (no use) of alcohol and/or illicit drugs? *[examples: Anabuse, Naltrexone (Revia or Vivitrol), Acamprosate, Bupreonorphine (Suboxonel)]* *(CalMed CIOM)*

- O Yes - If yes, specify:_____
- O No **[if No, skip to B18a]**
- O Refused

M10. Please tell me which of the statements below describe how you feel about your medication-assisted treatment for your addiction. Please only respond about your medication-assisted treatment and not other types of medication for physical or mental health conditions. *(CalMed CIOM)*

[Read all responses, ask "Would you say "yes" or "no"? Mark all items that the participant agrees with.]

a. I no longer feel I need my medications	O Yes	O No
b. I would like to change my medications and/or dose	O Yes	O No
c. My medications aren't working for me the way I expected they would	O Yes	O No
d. I use vitamins, herbs, or food supplements	O Yes	O No
e. My medications make me too tired	O Yes	O No
f. My medications make me anxious	O Yes	O No
g. My medications interfere with my sexuality	O Yes	O No
h. My medications make me gain weight	O Yes	O No
i. I cannot afford my medications	O Yes	O No
j. My medications are working fine	O Yes	O No

M11. Please tell me which *one* statement that best describes the way you take your medications. *(CalMed CIOM)* *[choose only one response]*

- O I always remember to take my medications the way my doctor prescribed
- O I take my medications most of the time, but occasionally I forget
- O I take my medications until I start to feel better then I stop
- O I seldom take my medications
- O I never take my medications
- O Refused

The next questions are about children and child custody.

B18a. Do you have children (regardless of age)?
[If no, skip to CJ5a]

O Yes O No O Don't know O Refused O N/A

B18b. How many children do you have?
[If only older kids, skip to B18c1]

Number of children under 18 years: [ ][ ]

Number of children older than 18 years: [ ][ ]

O Refused O N/A

B18c. Have you ever had children removed from your care by DHS (or authorities)?
[If no, skip to CJ5a]

O Yes O No O Don't know O Refused O N/A

B18c1. How many children have been removed from your care?

Number of children *(this is actually children - times to account for having one or more children removed 1+ times):* [ ][ ]

B18c2. How many children were removed from your care due to alcohol and/or drug issues?

Number of children/times: [ ][ ]
(88=Refused, 99=NA)

Thank you for answering those questions. The next few questions are about your legal status.

CJ5a. Have you been arrested and charged for any offense in the past 30 days? This includes things like major driving violations, contempt of court, disorderly condunt, probation/parole violations, as well as any other type of offense?

- O Yes
- O No **[if No, skip to CJ8]**
- O Refused **[if refused, skip to CJ8]**

CJ5. How many times in the last 30 days have you been arrested and charged with the following? *[If 0 on all, skip to CJ8]* *(modified ASI LITE)*

a. Disorderly conduct, vagrancy, public intoxication	[ ][ ]
b. Driving under the influence of intoxicants (DUII)	[ ][ ]
c. Major driving violation (e.g. reckless driving)	[ ][ ]
d. Identity theft	[ ][ ]
e. Shoplifting/vandalism	[ ][ ]
f. Parole/probation violations	[ ][ ]
g. Drug charges	[ ][ ]
h. Forgery	[ ][ ]
i. Weapon offense	[ ][ ]
j. Burglary/larceny/breaking and entering	[ ][ ]
k. Robbery	[ ][ ]
l. Assault	[ ][ ]
m. Arson	[ ][ ]
n. Rape	[ ][ ]
o. Homicide/manslaughter	[ ][ ]
p. Prostitution	[ ][ ]
q. Contempt of court	[ ][ ]
s. Theft	[ ][ ]
r. Other _____	[ ][ ]

CJ6. How many of these charges resulted in convictions? *(ASI LITE)* ☐☐

CJ8. In the past 30 days, how many days were you detained or incarcerated? *(modified ASI LITE)* ☐☐ days

CJ12. Have you been in any controlled living environment (such as jail or residential treatment) in the past 30 days? *[mark all that apply]* *(ASI LITE)* *[cross check with B4]*

- ○ No
- ○ Jail
- ○ Alcohol or Drug Treatment
- ○ Psychiatric Treatment
- ○ Other *[this includes sober house]* (specify):_____
- ○ Refused

The next set of questions ask about psychological status.

P1. Have you had a significant period of time within the last 30 days (that was not a direct result of alcohol/drug use) in which you have: *[see table below, read each item, record yes or no]* *(ASI LITE)*

a. Experienced serious depression - sadness, hopelessness, loss of interest, difficulty with daily function?	○ Yes ○ No ○ Refused
b. Experienced serious anxiety/tension -- feeling unreasonably worried, inability to feel relaxed?	○ Yes ○ No ○ Refused
c. Experienced hallucinations - saw things or heard voices that were not there?	○ Yes ○ No ○ Refused
d. Experienced trouble understanding, concentrating, or remembering?	○ Yes ○ No ○ Refused
e. Experienced trouble controlling violent behavior, including episodes of rage or violence?	○ Yes ○ No ○ Refused
*f. Experienced serious thoughts of suicide? (seriously considered a plan for taking your life)	○ Yes ○ No ○ Refused
*g. Attempted suicide? (doing suicidal gestures or attempts)	○ Yes ○ No ○ Refused
h. Been prescribed medication for any psychological or emotional problems? (prescribed by an MD and/or psychiatrist)	○ Yes ○ No ○ Refused

P3. How many days in the past 30 have you experienced these psychological or emotional problems? *(ASI LITE)*

☐☐ days ***[If P1a through P1g are 0, skip to S1]***

(ASI LITE) **USE SHOW CARD A**	**Not at all**	**Slightly**	**Considerably**	**Moderately**	**Extremely**	**Don't know**	**Refused**	**N/A**
P4. How much have you been troubled or bothered by the psychological or emotional problems described above in the past 30 days?	○	○	○	○	○	○	○	○

Thank you for answering those difficult questions. Now, I just have a few remaining questions to close our interview.

Final Questions

S1. What was the most helpful service of support that you received from *[name of referral agency]?*

S2. What would you change about the treatment services you received at *[name of referral agency]*?

I2. Is there important clarifying information that should be included?

INTERVIEWER PLEASE COMPLETE: The remaining items on this page are NOT TO BE ASKED OF THE CLIENT, but are to be completed by the interviewer.

I1. At the time of the interview, is client: (ASI LITE)

a. Obviously depressed/withdrawn	○ Yes ○ No
b. Obviously hostile	○ Yes ○ No
c. Obviously anxious/nervous	○ Yes ○ No
d. Having trouble with reality testing, thought disorders, paranoid thinking	○ Yes ○ No
e. Having trouble comprehending, concentrating, remembering	○ Yes ○ No
f. Having suicidal thoughts - [mandated reporting trigger]	○ Yes ○ No

APPENDIX D: DISCHARGE SUMMARY SHEET

AMH Client Discharge Summary Sheet

Instructions: Please complete for each client at the time s/he exits treatment. This form should be completed when the client exits the treatment modality that they entered at the beginning of the research study. So, if the client is enrolled in the study at intake for residential treatment, then this form should be completed when the client exits residential treatment, **even if the client moves on to another treatment modality.**

Please mail or fax all completed forms to: NPC Research, Attention: AMH Follow-up study
Fax Number: 503-243-2454

Name of person completing this form: _____

1. Client's Case Number/Unique ID (# submitted to CPMS):
_____

2. Client Name (please print neatly):
_____

3. Date of client's first contact with program: _____/_____/_____
mo day year

4. Date of assessment: _____/_____/_____
mo day year

5. Date of admission: _____/_____/_____
mo day year

Please list the dates of the first four treatment sessions provided to the client, and indicate whether each session was a group (G) or individual (I) session. If the client is exiting residential treatment, please list the first 4 days of residential treatment.

6. Date of session #1: _____/_____/_____ ____Group *or* _____Individual
mo day year

7. Date of session #2: _____/_____/_____ ____Group *or* _____Individual
mo day year

8. Date of session #3: _____/_____/_____ ____Group *or* _____Individual
mo day year

9. Date of session #4: _____/_____/_____ ____Group *or* _____Individual
mo day year

10. Date of last service delivered to client: _____/_____/_____ Was this ____Group *or* ____Ind?
mo day year

11. Date of Program Exit: _____/_____/_____
mo day year

12. Total number of individual treatment sessions completed: _____

13. Total number of group treatment sessions completed: _____

14. As compared to intake, **at exit** was the client's overall substance use (please do not include any nicotine products in your assessment) (CIRCLE ONE):

1=reduced at exit
2=stayed the same at exit
3=increased at exit
4=no use at exit
5=unknown or not assessed.

15. What was the client's ASAM level of care at intake? _____

16. What was the client's last ASAM level of care prior to exit? _____

17. Exit Status: Please **circle the answer** that best describes this client's situation at exit:

1 =Initial Appointments Not Kept Within 14 Days of Enrollment

2 =Client Termination Without Clinic Agreement

3 =Treatment is Complete

4 =Further treatment is not appropriate for client at this facility or in this service

5 =Non-compliance with Rules

6 =Client Moved out of Catchment Area

7 =Client Cannot Get to Facility

8 =Client Cannot Come for Service During Facility Hours

9 =Client Incarcerated

10 =Client Deceased

11 =Parents/Legal Guardian Withdrew Client

12 =Termination Due to Program Cut/Reduction

13 =Termination Due to Physical Health

14 =Termination Due to Mental Health

15 = Client transferred to a different treatment modality (e.g. from residential to outpatient) within the same agency.

APPENDIX E: BIVARIATE SIGNIFICANCE TEST TABLES

Table E3. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: Living Situation, Income and Employment Measures[69,70]

Item description	N for test	Statistical test and test values
Employment	431	Wilcoxon Z = -4.83, p =.000
Income	370	Wilcoxon Z = -4.04, p =.000
Number of dependents relying on them for the majority of their food, shelter, etc.	428	Wilcoxon Z = -6.61, p =.000
Living with someone with A&D problem?	427	McNemar's Chi-Square with continuity correction =16.41, p =.000
Controlled living status (past 30 days) • Jail • Inpatient A&D treatment • Other (sober house, psychiatric treatment, etc.)	 • 431 • 431 • 431	 • McNemar's Chi-Square with continuity correction =19.34, p =.000 • McNemar's Chi-Square with continuity correction =37.50, p =.000 • McNemar's Chi-Square with continuity correction = 10.08, p =.001

Table E4. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: Alcohol and Drug Use in the Past 30 Days

Item description	N for test	Statistical test and test values
Abstinent from alcohol use	387	McNemar's Chi-Square with continuity correction =7.56 p =.006
Abstinent from substance use	389	McNemar's Chi-Square with continuity correction =96.99, p =.000
Number of days longest period of abstinence	377	Wilcoxon Z = -7.66, p =.000
Number of days of alcohol use	387	Wilcoxon Z = -2.63, p =.009
Number of days of all illicit drug use	389	Wilcoxon Z = -8.52, p =.000

[69] Due to the highly non-parametric nature of data distributions, non-parametric paired tests were used for all analyses. All tests were conducted in SPSS Version 19. For paired tests of nominal data, McNemar tests were used; when there were too few responses to run a McNemar test, the binomial test was used (see Glantz. (2002). *Primer of biostatistics* (5th ed.). New York: McGraw Hill Medical Publishing Division, pp. 330-333, 219. For paired tests of ordinal or non-normal scale data, the Wilcoxon test was used (Glantz, pp. 354-355). These tests provide more conservative estimates of statistical significance.

[70] Please note that Appendix D table numbers corresponds with table numbers in the main part of the report. For example, the first table in Appendix D (Table D3) corresponds with report Table 3 in the Results section: this is the first table to report significant results for baseline to 12-month survey data.

Item description	N for test	Statistical test and test values
Number of days more than once substance used per day	362	Wilcoxon Z = -5.22, p =.000
The average amount of money spent on: • Alcohol • Drugs	 • 392 • 383	 • Wilcoxon Z = -2.59, p =.010 • Wilcoxon Z = -5.93, p =.000

Table E5. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: # of Days Illegal/Non-Prescribed Substances Used in the Past 30 Days

# Days substance used	N for test	Statistical test and test values
Any alcohol use	387	Wilcoxon Z = -2.63, p =.009
Binge drinking (5+drinks in a few hours) [71]	379	Wilcoxon Z = -4.37, p =.000
Alcohol to intoxication	358	Wilcoxon Z = -4.11, p =.000
Cannabis	376	Wilcoxon Z = -7.16, p =.000
Amphetamines/methamphetamine	364	Wilcoxon Z = -4.94, p =.000
Other opiates/painkillers	361	Wilcoxon Z = -2.78, p =.005
Prescription drugs (not prescribed or not for the prescribed purpose)	334	Wilcoxon Z = -2.88, p =.004
Heroin	359	Wilcoxon Z = -2.86, p =.004
Cocaine	358	Wilcoxon Z = -2.26, p =.024
Methadone	359	Wilcoxon Z = -2.31, p =.021
Other sedatives or tranquilizers	358	Wilcoxon Z = -2.85, p =.004
Barbiturates	355	Wilcoxon Z = -2.53, p =.012
Inhalants	355	Wilcoxon Z = -0.67, p =.500
Hallucinogens	354	Wilcoxon Z = -1.34, p =.180
Uses tobacco on a daily basis*	423	McNemar's Chi-Square with continuity correction = 7.55, p =.006

* The possible responses to this item are "yes" and "no."

[71] For one provider (N=25), the definition used at baseline was 5 or more drinks in a day.

Table E6. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: Mental Health

Mental health issue	N for test	Statistical test and test values
Experienced serious depression (past 30 days)	430	McNemar's Chi-Square with continuity correction =39.24, p =.000
Experienced serious anxiety (past 30 days)	430	McNemar's Chi-Square with continuity correction =52.41, p =.000
Experienced hallucinations (past 30 days)	431	McNemar's Chi-Square with continuity correction =8.83, p =.003
Experienced trouble understanding, concentrating, or remembering (past 30 days)	425	McNemar's Chi-Square with continuity correction =35.07, p =.000
Experienced trouble controlling violent behavior, including episodes of rage or violence (past 30 days)	430	McNemar's Chi-Square with continuity correction =8.51, p =.004
Experienced serious thoughts of suicide (past 30 days)	430	Binomial test, p =.052
Attempted suicide (past 30 days)	427	Binomial test, p =.250
Been prescribed medication for any psychological or emotional problems (past 30 days)	430	McNemar's Chi-Square with continuity correction =20.38, p =.000
Average # of days experienced any of the above psychological/emotional problems (past 30 days)	213	Wilcoxon Z = -3.55, p =.000
Average # of days participants report experiencing any medical issues (past 30 days)	401	Wilcoxon Z = -1.85, p =.064

Table E7. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: Treatment Services

Item description	N for test	Statistical test and test values
Currently receiving substance abuse treatment	432	McNemar's Chi-Square with continuity correction =311.00, p =.000
Tried to access a self-help group (past 30 days)	275	McNemar's Chi-Square with continuity correction =20.38, p =.000
Tried to access outpatient A&D treatment at a community clinic (past 30 days)	295	McNemar's Chi-Square with continuity correction =74.07, p =.000
Tried to access residential A&D treatment at a community clinic (past 30 days)	269	McNemar's Chi-Square with continuity correction =43.86, p =.000
Tried to access detoxification services (past 30 days)	271	McNemar's Chi-Square with continuity correction =25.29, p =.000
Tried to access A&D treatment at a local community hospital (past 30 days)	268	Binomial test, p =.002
Tried to access A&D treatment at a public health clinic (past 30 days)	269	Binomial test, p =.227
Was able to get into above services	33	Binomial test, p =.727
For those who were able to access services, average wait time	3	Wilcoxon Z = -1.07, p =.285
Using medication-assisted therapy for substance abuse	418	Binomial test, p =.263

Table E8. Significance Tests for Comparison of Baseline and 6-Month Follow-Up Outcomes: Criminal Justice Involvement[72]

Item description	N for test	Statistical test and test values
Arrested in the past 30 days	309	McNemar's Chi-Square with continuity correction =25.41, p =.000
For those who were incarcerated in the past 30 days, # of days of incarceration	355	Wilcoxon Z = -5.09, p =.000

[72] Because there were 26 known participants who were incarcerated during some or all of the follow-up period and were unable to be interviewed, the 12-month information in Table 8 is certainly underestimated.

Table E9. Significance Tests for Comparison of Baseline and 12-month Follow-Up Outcomes: Clients' Perceived Outcomes

Item description	N for test	Statistical test and test values
I am not likely to use alcohol and/or other drugs	429	Wilcoxon Z = -3.16, p =.002

Table E10. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: Social Connectedness

Item description	N for test	Statistical test and test values
There is someone who cares about whether I am doing better	429	Wilcoxon Z = -1.83, p =.067
I have someone who will help when I have a problem	430	Wilcoxon Z = -2.08, p =.038
I have people in my life who are a positive influence	428	Wilcoxon Z = -0.86, p =.390
The people I care about are supportive of my recovery	422	Wilcoxon Z = -1.80, p =.071
People count on me to help them when they have a problem	427	Wilcoxon Z = -1.24, p =.212
I have friends who are clean and sober	429	Wilcoxon Z = -6.06, p =.000
I have someone who will listen to me when I need to talk	430	Wilcoxon Z = -1.81, p =.071

Table E11. Significance Tests for Comparison of Baseline and 12-Month Follow-Up Outcomes: Clients' Recognition That They May Have a Problem

Item description	N for test	Statistical test and test values
Using alcohol and/or drugs is a problem for me	426	Wilcoxon Z = -7.94, p =.000
I need to work on my problems with alcohol and/or drugs	427	Wilcoxon Z = -10.02, p =.000
Reported having "alcohol problems" in the past 30 days	367	Wilcoxon Z = -3.50, p =.000
Reported having "drug problems" in the past 30 days	353	Wilcoxon Z = -6.32, p =.000

Table E12. Significance Tests for Comparison of 6-Month and 12-Month Follow-Up Outcomes: Client Satisfaction[73]

Item description	N for test	Statistical test and test values
When I needed services right away, I was able to see someone as soon as I wanted	368	Wilcoxon Z = -0.89, p =.373
The people I go to/went to for services spent enough time with me	375	Wilcoxon Z = -1.09, p =.275
I helped to develop my service and treatment goals	374	Wilcoxon Z = -0.89, p =.372
The people I went to for services were sensitive to my cultural background	367	Wilcoxon Z = -0.22, p =.825
I was given information about different services that were available to me	373	Wilcoxon Z = -0.10, p =.917
I was given enough information to effectively handle my problems	373	Wilcoxon Z = -0.34, p =.738
Transportation to and from treatment is convenient	367	Wilcoxon Z = -2.02, p =.044

[73] The comparison is between 6- and 12-month surveys because client satisfaction questions were not asked at baseline.

APPENDIX F: VARIABLES USED IN THE MULTIVARIATE ANALYSES

Variables Used in the Multivariate Analyses

Type of variable	Variable	Notes
Outcome		
	Abstinent from drugs and alcohol at 12 months	Drug abstinence collecting by looking for individuals who reported zero use across all drugs. 0 = No, 1 = Yes
	Abstinent from alcohol at 12 months	0 = No, 1 = Yes
	Abstinent from drugs at 12 months	Drug and alcohol abstinence collecting by looking for individuals who reported zero use across all drugs and alcohol. 0 = No, 1 = Yes
	Unemployed at 12 months	Individuals who reported being unemployed at 12 months for any reason. 0 = No, 1 = Yes
Baseline demographics		
	Gender	
	Mental health issues in past 30 days	Calculated by looking for individuals who answered yes to any questions about mental health symptoms in past 30 days. Individuals who chose not to answer these questions were coded as missing.
	Age in 2010	Computed from year of birth
	Ethnicity	Coded into the following groups: Multiracial, Caucasian, African-American, Hispanic, Native American/Alaskan, Asian/Other
	Income	Overall income from all sources of income
	Physical/sexual/emotional abuse in past 30 days	Calculated by looking for individuals reporting any forms of abuse in past 30 days. Individuals who chose not to answer these questions were coded as missing. 0 = No, 1 = Yes
	Physical health issues	Recoded into yes/no from the question "how many days in the past month have you experienced physical health problems?" 0 = No, 1 = Yes, individuals who chose not to answer were coded as missing

	DUII status	Asked at 6 and 12 months 0 = No, 1 = Yes
	GED status	Highest education attained at baseline 0 = No GED/high school, 1 = Yes GED/high school
	Unemployed	0 = No, 1 = Yes, individuals who did not give their employment status were coded as missing.
	Conflict with social group	Continuous variable expressing how many people individuals report having conflict with. Higher values indicate greater levels of conflict. Individuals who chose not to answer these questions were coded as missing.
	Friends who are sober at baseline and 12 months	Individuals who rated they agree or strongly agree they have friend who are sober both at baseline and again at 12 months. Individuals who did not answer either the baseline or 12 month question were coded as missing.
Treatment items		
	Treatment graduation status	Coded to reflect successful program completion rather than ending services prematurely. 0 = Non successful, 1 = successful, individuals with missing outcomes were coded as missing.
	Number of individual treatment sessions per week	Collapse to reelect the average number of sessions per week to control for individuals being in the program for different lengths of time
	Number of past treatment events	Sum of past drug or alcohol treatment events previous to the current event. Individuals who chose not to answer these questions were coded as missing.

APPENDIX G: LESSONS LEARNED FROM THIS STUDY TO INFORM FUTURE RESEARCH

Lessons Learned to Inform Future Research

This report constitutes the first step toward a product that might be used to guide AMH policy and practice in the months and years to come. Therefore, it is important to reflect upon what has been learned so far. The following points are organized loosely in chronological order.

Working with providers to obtain buy-in – at baseline and throughout the study period

It became clear early on in attempting to recruit treatment providers to participate in this study that the staff time required for training, recruiting participants into the study, and conducting the baseline interviews and discharge summaries was a significant obstacle for agencies already operating in a difficult fiscal environment.

- When at all possible, **funds should be set aside to compensate providers** for their staff time.
- Using **qualitative research tools** with treatment providers to understand the context of their treatment model, their treatment philosophy, and methods may serve both to encourage participation as well as provide needed information about the treatment environment.

A related issue to obtaining treatment agency buy-in is fostering a sense of accountability on the part of providers. For example, to be able to report each provider's own results back to them, a sufficient number of participants from each provider are required so as not to breach confidentiality. Because of the small numbers of clients obtained from some agencies, giving providers anything more than very basic data would constitute a breach of participant confidentiality (e.g., the referred two cocaine users who both continued using).

- A specialized, **hands-on and user-friendly training for providers** on how research and evaluation can be valuable both for program improvement, advocacy, and for obtaining new funding could prove an important way to increase buy-in, accountability, and increased numbers of participants in future studies.

Tracking clients

Undoubtedly, tracking substance abuse treatment clients—particularly ones involved with the criminal justice system—can be challenging. Providers were asked to fill out locator forms with contact information both for the study participants, but also for friends, family, and others who might know the whereabouts of clients at follow-up. Data collectors relied heavily upon these locator forms for contacting participants to schedule follow-up interviews. Due in part to the demands on provider staff time and/or the fact that many clients simply did not have good contact information, the locator forms often had little or no actionable telephone numbers or addresses for clients; this made following-up with some participants all but impossible.

- Again, **compensating treatment providers** for their time might resolve this issue, as would **providing more generous incentives for individual study participants** who complete the follow-up interviews. The ten dollars allocated for the AMH study follow-up interviews is quite low for such incentives.

- Further **training for providers as to the importance of locator forms** might also be useful.[74]

Related to the issue of provider buy-in, successfully tracking clients, and ensuring client confidentiality, is the question of who should complete enrollment into a study of this type.

- Having an **impartial research organization with trained research staff** conduct the baseline data collection would certainly be more costly; however, it would also result in less missing data, better locator information and the ability for research staff to establish relationships with study participants early on that might lead to more honest responses to questions about socially-proscribed behavior.

Future study of DUII treatment

The dearth of past studies specifically relating to DUII treatment, as well as the results of this study, indicate that DUII clients behave differently than other clients in the study.

- Future research which takes a closer look at **DUII treatment effectiveness** would be very useful to help inform state policies on DUII treatment. Such a study might involve more qualitative data on DUII treatment curricula, including materials review, interviews with treatment staff and clients, observation of treatment groups, etc. It would be very interesting to compare those treatment providers who separate DUII clients from other addictions/dependency clients and those who do not.
- Furthermore, the current sample of DUII clients tended to use alcohol throughout the study period, but we have no information about whether their drinking/using and driving behavior changed. Adding questions to explore **the extent to which DUII clients refrain from drinking/using and driving** (and if not, why not) would be an important area of clarification.

Future study of substance abuse/addictions treatment

- In addition, the amount of variability explained by the multivariate models was medium to low. This suggests other unifying variables which may help to predict outcomes and improve treatment. One possible variable which has been shown to assist in predicting outcomes across groups is the stages-of-change model (e.g., Prochaska et al, 1992). It may be useful to add a **stages of change questionnaire** to initial screening instruments – both to help program managers better match program participants to the treatment model – and to generate more predictive analytical models.
- Individuals involved in substance abuse treatment or DUII treatment may struggle to find ways to describe their experiences as well as what they feel their treatment needs are and may find themselves marginalized due to socioeconomic status, ethnicity, drug use, or other factors. It may be useful for future evaluators to examine research paradigms from the **Participatory Action Research** field (e.g., Whyte, 1991) where client involvement is integrated into the research process, helping to obtain input from voices that are not typically heard and helping to pose research hypotheses which may not be apparent to academic researchers.

[74] Please note that NPC staff did follow up with treatment provider staff to help complete missing intake forms, including the locator form, and were more successful with some providers than others.

- Program completion status (e.g., successful graduation as opposed to early withdrawal) was not found to be significant in final regression questions. Nevertheless, attention should be paid to the fact that **individuals had different number of treatment sessions, different proportions of individual vs. group sessions, different program length of stays, and different program outcomes.** It may be useful in the future to gather additional formative evaluation data on programmatic experience in other to better understand the relationship between baseline measures such as readiness to change and amount of program involvement.
- One of the most common elements of substance abuse treatment **aftercare** is self-help group attendance. In this sample, the proportion of participants who reported attending self-help groups at 6 and 12 months was linked to whether they were still in treatment. At 6 months, 82% of participants still in treatment reported attending self-help groups and 78% of those in treatment at 12 months were attending self-help groups. Conversely, of the participants who were *not* in treatment at both 6 and 12 months, 34% reported attending self-help groups. Further exploring why self-help groups "stick" for some treatment clients and not others after treatment is important. If self-help groups are the only form of aftercare, and one third of study participants were not making use of such groups, then other strategies may be needed.
- The data collected and analyzed as part of this study are just one important piece of the puzzle about treatment effectiveness. To really understand what types of treatment work best for what types of clients, in depth **qualitative research** is needed. For example, a content analysis of the various treatment curricula, interviews with treatment staff and clients, observation of treatment groups, treatment model fidelity measurement, etc., would all help unlock the "black box" of treatment.
- From a policy standpoint, it would be extremely valuable to conduct a **cost-benefit analysis for alcohol and drug treatment**. What does it cost to provide treatment services and what are the costs (criminal recidivism, foster care, court costs, healthcare, early death, etc.) to society of not providing such services? Such a study design would be challenging: the ideal would be important to find a sample of people who did not receive treatment services, but were otherwise similar to those who did receive services.

Opportunities for future research using these data and existing administrative databases

There are some very exciting ways that the data from this study can be further explored in the coming months and years.

- This study has established a **methodology** for follow-up which future longitudinal projects can use to build from this project by linking these data to other state administrative databases. The aim would be to explore more deeply to understand how to produce better outcomes thereby supporting data-driven decision- and policy-making. There are several databases that could potentially be linked to the AMH study database. **Linking these datasets together** and exploring them with an eye to determining the more far-reaching impact of publicly funded substance abuse treatment will be a major contribution to the ongoing conversations about budget priorities and data driven decision making in Oregon. For example:

- **OHP data for medical utilization** can be linked with AMH follow-up study data to examine whether substance abuse treatment helped to reduce medical system utilization;
- **Criminal justice system data** can be linked to gain objective information about whether treatment resulted in decreased criminal recidivism;
- **Statewide treatment data** contains information about drug testing that can be linked with these data to explore more objective information (than self-report) about substance use; and
- **Child welfare system data** can be linked to find out how many participants lost custody of their children—or, more happily, were reunited with them.

- AMH itself has quite a large, longitudinal database (the Client Processing and Monitoring System and, its successor, the Web Infrastructure for Treatment Services system) that can be used to probe issues important to Oregon policy makers and citizens. **Funding exists for data analysis**, especially from the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Institute on Drug Abuse (NIDA), etc. Seeking funding for additional research with Oregon's own data to answer Oregon's specific questions would be an important step toward answering some of the questions raised by this study.