

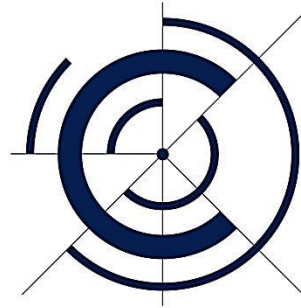


State of Iowa Outcomes Monitoring System

THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

**Year 18
Annual Outcome Evaluation Report
September 2016**

With Funds Provided By:
Iowa Department of Public Health,
Division of Behavioral Health,
Bureau of Substance Abuse



**THE IOWA
CONSORTIUM**
FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

**State of Iowa
Outcomes Monitoring System
Year 18 Annual Evaluation Report
September 2016**

**Suzy Hedden, BS
Evaluation Coordinator**

**Stephan Arndt, PhD
Director**

Citation of references related to this report is appreciated. Suggested Citation:

Hedden, S., & Arndt, S. (2016). State of Iowa Outcomes Monitoring System: Year 18 Annual Outcome Evaluation Report. (Iowa Department of Public Health contract #5886YM50). Iowa City, IA: Iowa Consortium for Substance Abuse Research and Evaluation.

<http://iconsortium.subst-abuse.uiowa.edu/>

EXECUTIVE SUMMARY

The Outcomes Monitoring System (OMS) was established to systematically gather data on substance use disorder treatment outcomes in Iowa. Randomly selected clients from up to 22 treatment agencies receiving funding from the Iowa Department of Public Health were contacted for follow-up interviews. The interviews occur approximately six months after discharge from treatment. This report examines outcomes for clients admitted in calendar year 2015. Outcomes are presented for 419 of the clients who completed the follow-up interview.

Client Characteristics of 2015 OMS Sample

Age and Sex: Clients ranged from 13 to 72 years of age at treatment admission, with a median age of 30 years. Approximately 75% of clients were male and approximately 25% were female.

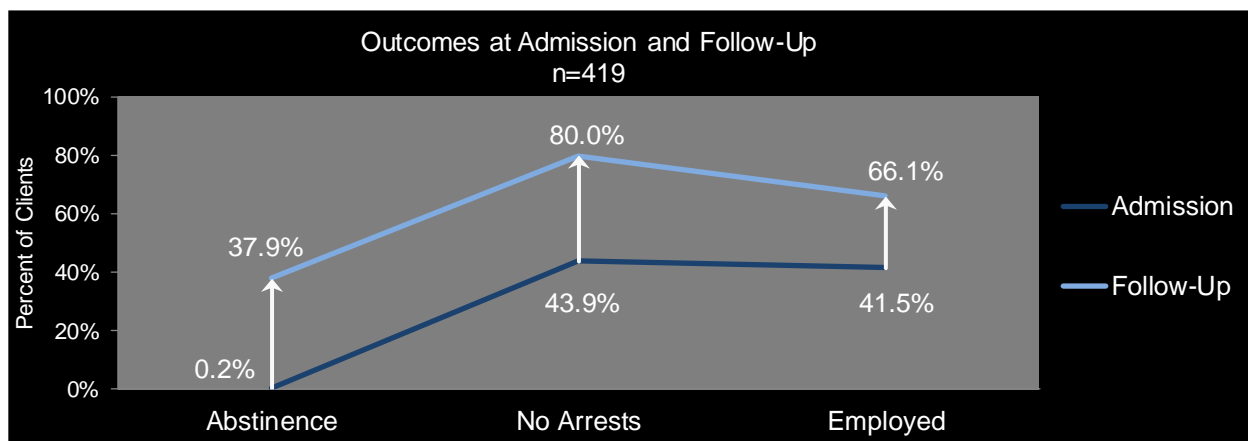
Race and Ethnicity: Caucasian/White was reported as the primary race at admission by approximately 85% of clients, nearly 10% reported African American/Black, fewer than 3% reported American Indian or another race. Over 7% of the clients reported Hispanic or Latino ethnicity at admission.

Substance Use at Admission: Nearly all clients (99.9%) indicated a primary substance of use at admission. Alcohol was the most common primary substance reported by 35.4% of the clients, followed by marijuana (29.5%), and methamphetamine (26.8%).

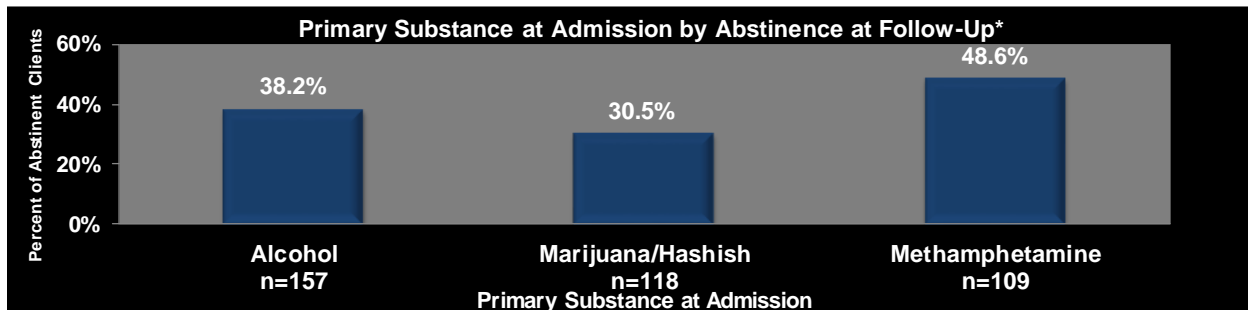
Outcomes for 419 Clients with Completed Follow-Up Interviews

The following data describe outcomes at admission and follow-up for clients who have completed the follow-up interview.

Abstinence, Arrests, and Employment at Admission and Follow-Up: Abstinence (based on the primary substance reported) increased by 37.7 percentage points from admission to follow-up (from one client at admission to 159 clients at follow-up). Over 55% of the clients reported arrests at admission, whereas 20% reported arrests at follow-up; it is important to note the admission response for the question about arrests refers to the 12 months prior to admission and the follow-up response refers to the six months following discharge. Fewer than half of the clients were employed at admission; however approximately two-thirds (66.1%) of clients indicated employment at follow-up.



Primary Substance at Admission by Abstinence at Follow-Up: There is a statistically significant association between primary substance at admission and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.05$).



*Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.05$).

Discharge Status by Outcomes Variables at Follow-Up: There are statistically significant associations between discharge status and no arrests at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$) and discharge status and employment at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.0001$). Clients who were successfully discharged were more likely to be arrest-free in the six-month post-discharge period and employed at follow-up. There is no significant association between discharge status and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Discharge Status	N	Abstinence at Follow-Up percent	No Arrests at Follow-Up** percent	Employed at Follow-Up*** percent
Successful Completion	255	38.0 (97)	85.5 (218)	75.3 (192)
Terminated	129	33.3 (43)	70.5 (91)	52.7 (68)
Neutral Discharge	34	52.9 (18)	73.5 (25)	50.0 (17)

*Data for the reason for discharge are missing for one client.

**Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.01$).

***Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.0001$).

Length of Stay by Outcomes Variables at Follow-Up: There are statistically significant associations between length of stay and abstinence at follow-up (Jonckheere-Terpstra Test, $p < 0.001$) and length of stay and employment at follow-up (Jonckheere-Terpstra Test, $p < 0.05$).

- Of the 141 clients receiving treatment for more than 90 days, nearly half (48.9%, 69 clients) reported abstinence in the six-month period following treatment discharge whereas 54 of 199 clients (27.1%) receiving treatment for 60 days or less indicated abstinence at follow-up.
- One hundred one of 141 clients (71.6%) who received treatment for more than 90 days reported they were employed full or part-time six months at follow-up. Fewer than 60% of clients receiving treatment for less than 30 days were employed at follow-up (69 of 120 clients, 57.5%).

There is no statistically significant association between length of stay and arrests at follow-up (Jonckheere-Terpstra Test, $p > 0.05$).

TABLE OF CONTENTS

Background.....	1
Evaluation Process and Methods.....	1
Data Collection.....	1
Sampling Procedure.....	1
Recruitment.....	1
Tracking.....	2
Follow-Up Interview.....	2
Clients.....	3
Description of Clients in OMS Sample.....	3
Figure 1. Age and Sex at Admission.....	3
Figure 2. Race.....	4
Figure 3. Ethnicity.....	4
Recruitment, Tracking, and Follow-Up Efforts.....	4
Description of Clients Completing Follow-Up Interviews.....	5
Changes From Admission to Follow-Up.....	5
Table 1. Primary Substance.....	7
Table 2. Secondary Substance.....	8
Table 3. Frequency of Use of Primary Substance: Clients Indicating Use of Same Primary Substance at Both Admission and Follow-Up.....	9
Table 4. Attendance at Voluntary Recovery Support Meetings.....	10
Table 5. Arrests.....	10
Table 6. Hospitalizations Due to a Substance Use Related Problem.....	11
Table 7. Employment Status.....	11
Table 8. Months Employed.....	12
Table 9. Taxable Monthly Income.....	12
Table 10. Primary Source of Support.....	13
Table 11. Days Missed of Work or School Due to Substance Use.....	13
Table 12. Relationship Status.....	14
Table 13. Living Arrangements.....	15
Table 14. Education at Follow-Up.....	16
Outcomes: Abstinence.....	16
Table 15. Primary Substance at Admission by Abstinence at Follow-Up.....	17
Table 16. Employment at Follow-Up by Abstinence at Follow-Up.....	18
Table 17. Change in Employment Status from Admission to Follow-Up by Abstinence at Follow-Up.....	18
Table 18. Living Arrangements at Follow-Up by Abstinence at Follow-Up.....	19
Table 19. Monthly Income at Follow-Up by Abstinence at Follow-Up.....	20
Table 20. Change in Income from Admission to Follow-Up by Abstinence at Follow-Up.....	20
Table 21. Primary Income Source at Admission and Follow-Up by Abstinence at Follow-Up.....	21
Table 22. Arrests at Follow-Up by Abstinence at Follow-Up.....	21
Table 23. Voluntary Recovery Support Meetings Attended at Follow-Up by Abstinence at Follow-Up.....	22



Outcomes: Arrests and Employment.....	22
Table 24. No Arrests at Follow-Up by Primary Substance at Admission.....	23
Table 25. Employment at Follow-Up by Primary Substance at Admission.....	24
Outcomes: Sex	25
Figure 4. Primary Substance at Admission and Follow-up by Sex.....	25
Figure 5. Frequency of Use of Primary Substance by Sex: Clients Indicating Use of Same Primary Substance at Both Admission and Follow-Up	26
Length Of Stay and Discharge Status	26
Table 26. Length of Stay by Outcome Variables at Follow-Up.....	27
Table 27. Discharge Status by Outcome Variables at Follow-Up	28
Figure 6. Median Length of Stay by Primary Substance at Admission.....	29
Table 28. Length of Stay by Primary Substance at Admission	29
Clients' Perceived Benefits of Treatment.....	30
Table 29. Clients' Perceived Benefits.....	30
Additional Follow-Up Data.....	30
Table 30. Mental Health Assessments and Referrals.....	31
Table 31. Psychiatric Problem Reported at Admission by Mental Health Assessments and Referrals During Substance Use Disorder Treatment	32
Table 32. Clients Referred for Mental Health Services by Treatment Agency: Receiving Mental Health Services While in Substance Use Disorder Treatment	33
Table 33. Location of Mental Health Services	33
Table 34. Perceived Benefit of Mental Health Services Received During Substance Use Disorder Treatment.....	34
Table 35. Medications for Psychological or Emotional Problems While in Treatment ...	34
Table 36. Clients Still Taking Medications for Psychological or Emotional Problems Six Months Following Treatment Discharge	35
Figure 7. Stress.....	36
Figure 8. Reduction in Activities	36
Figure 9. Physical Health	36
Figure 10. Emotional Health.....	37
Table 37. Discharge Status: Comparison of Recorded Discharge Status and Clients' Perceptions of How Treatment Ended	37
Appendix: Presentation of Tracking Data	38
Table A1. Client Classifications.....	39
Figure A1. Classification of 2015 OMS Sample.....	40
Tracking Report: 2015 OMS Sample	41
Table A2. Case Status – All Clients	41
Table A3. Closed Clients by Category.....	41
Table A4. Recruitment and Follow-Up Rates	41
Client Contacts: 2015 OMS Sample	42
Table A5. Type and Number of Client Contacts through September 12, 2016	42
Table A6. Contacts for Clients with Closed Cases	43



BACKGROUND

In July 1998, at the request of the Iowa Department of Public Health (IDPH), the Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) designed and tested an Outcomes Monitoring System (OMS) to report substance use disorder treatment outcomes in Iowa. Implementation of the OMS project provided an independent evaluation regarding client outcomes and relieved treatment agencies from the responsibility of tracking and interviewing clients following discharge. The Consortium has provided ongoing client sampling, recruitment, tracking, data collection, data analyses, and reporting since January 1999.

The Consortium conducts follow-up interviews with randomly selected clients from the 22 substance use disorder treatment agencies receiving IDPH funding. The interviews occur approximately six months after discharge from the treatment program and provide follow-up data to determine outcomes as well as analyze changes between admission and follow-up. This report examines outcomes for clients admitted to substance use disorder treatment in 2015. Outcomes are presented for 419 clients who completed the follow-up interview through September 12, 2016.

EVALUATION PROCESS AND METHODS

Data Collection

Substance use disorder treatment agencies in Iowa use a standardized client data collection instrument developed by IDPH. Data are collected by treatment agency staff on each client at admission and at discharge and transmitted to IDPH. The Consortium's follow-up data collection instrument integrates with client data recorded at admission. The follow-up instrument contains additional questions about mental health, how clients feel their treatment ended, if their substance use has caused stress and reduction in important activities, and a self-rating of physical and mental health six months following treatment discharge. Admission data, as well as follow-up data collected by Consortium staff, are client self-reported.

Sampling Procedure

Samples are drawn from the population of publicly funded clients admitted to substance use disorder treatment. This population includes clients who receive IDPH-funded drug or alcohol treatment in one of the following treatment environments: medically monitored residential, clinically managed residential, intensive outpatient, or outpatient. The Consortium utilizes IDPH's Central Data Repository (CDR) to obtain datasets and randomly select clients from the available admission records. The number of admissions vary each month; each sample is 15% or 120 clients, whichever is greater. Due to rounding, percentages in this report may not add up to exactly 100%.

Recruitment

When clients are admitted to substance use disorder treatment, the treatment agency provides information to the client that includes a letter from IDPH describing the follow-up project and the possibility of being selected for a follow-up interview. Immediately after the monthly OMS



sample is selected, Consortium research assistants attempt to contact clients to invite them to participate in the follow-up telephone interview. The Consortium's recruitment and tracking procedures are designed to enhance the level of participation in the evaluation process. The follow-up interview takes place approximately six months after discharge from treatment. A twenty dollar gift card is provided to the client upon completion of the follow-up interview.

When Consortium staff reach a potential participant via telephone, they explain they are calling on behalf of the Health Research Network (HRN) to talk about participation in a follow-up study. HRN is a pseudonym the Consortium utilizes to assist in protecting client confidentiality. Procedures are established so phone calls and mail from the Health Research Network may in no way be connected to substance use issues. Staff members confirm the identity of the client before describing the project in detail. The confirmation process includes matching the client's date of birth and last four digits of their social security number. If the information matches, the staff member reads the "Information Summary and Consent Document" that describes the OMS project and attempts to recruit the client by securing a verbal agreement to participate in the follow-up interview. Participants are informed they will receive periodic update calls or letters, approximately every six weeks, in an attempt to keep contact information current.

The Consortium has a toll-free number which is given to clients along with information regarding the confidential voice mail system. Clients without phone contact information or who do not have telephone service are sent letters asking them to call the Health Research Network's toll-free number regarding a public health study. If clients do not respond to the phone calls or letters, treatment agencies are contacted for assistance in updating contact information.

Clients may decline or withdraw participation in the OMS project at any time during recruitment or at any point during the follow-up interview process. There are no penalties for withdrawing participation in the study. Once a client declines participation, the case is officially closed unless the client later contacts the HRN and indicates a desire to participate. No future attempts are made to contact clients who choose not to participate in the follow-up interview.

Tracking

A secure web-based password-protected tracking system was developed by the Consortium to assist research assistants in managing individual client data. The system maintains updated tracking and detailed case status information for each client. This tracking information consists of the successful and attempted contacts made during efforts to communicate with the client. Detailed tracking information regarding the status of the entire OMS sample is displayed in the Appendix on pages 38 through 43.

Follow-Up Interview

In order to participate in the follow-up interview, clients must have a treatment discharge date confirmed by IDPH records. The follow-up interview is conducted by telephone six months after the client is discharged from treatment. It is not always possible to obtain the follow-up interview exactly six months after discharge; therefore, the project design allows staff to interview participants anywhere from two weeks prior to eight weeks after the six months post-discharge date. Clients receive a twenty-dollar gift card upon completion of the follow-up interview.



CLIENTS

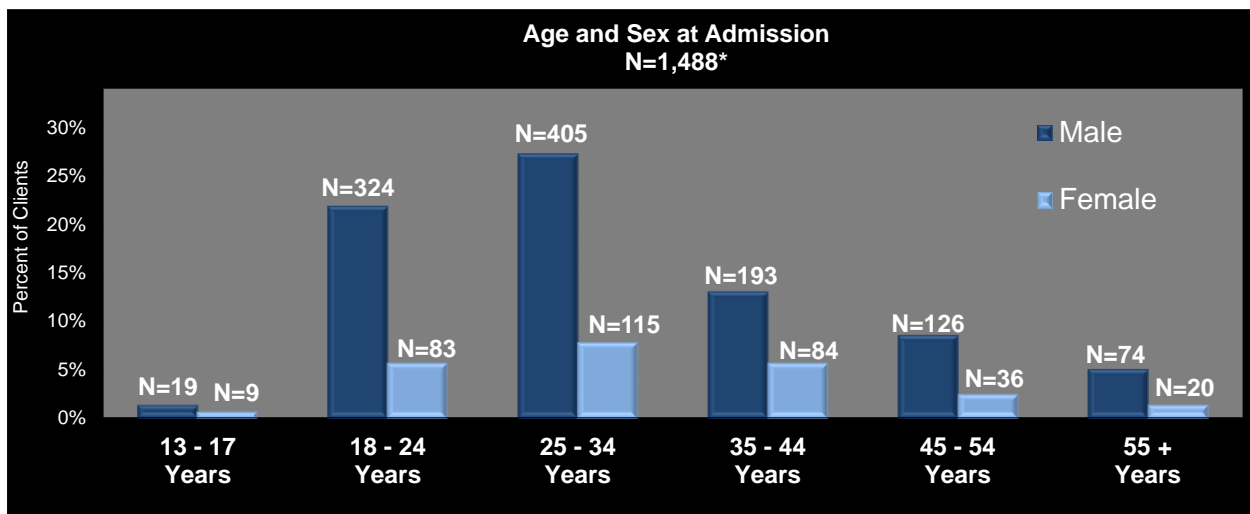
Description of Clients in OMS Sample

One thousand four hundred ninety-four clients with 2015 admission dates were selected to participate in the OMS project. This group of randomly selected clients had substance use disorder treatment admission dates from January 2, 2015 through December 31, 2015. Clients in the 2015 OMS sample received treatment at 21 of the 22 treatment agencies receiving funding from IDPH.

At treatment admission, clients ranged from 13 to 72 years of age with a median age of 30 years. Of the 1,494 clients, 1,466 (98.1%) were adults and 28 (1.9%) were adolescents (age 17 and younger). One thousand one hundred forty-one clients (76.4%) were male and 347 (23.2%) were female; data for sex were missing or reported as “unknown” for six clients (0.4%) at admission.

Figure 1 presents the number of males and females in six age categories. The highest numbers of males and females at admission were between 25 and 34 years of age. For all age categories, there were more males than females.

Figure 1. Age and Sex at Admission



*Data for six clients are not included in Figure 1 due to sex reported as “unknown” or missing data at admission.

Figure 2. Race

Figure 2 presents race reported at admission for clients in the OMS sample. Caucasian/White was the primary race reported by 1,258 (84.2%) of clients; 147 clients (9.8%) indicated African American/Black, 24 clients (1.6%) reported American Indian, and 12 clients (0.8%) reported “other race”. The “other race” category includes clients who reported Asian or Hawaiian or Pacific Islander as their primary race. Additionally, 53 clients (3.5%) clients responded “unknown” when asked about their race or the data are missing or reported as “not collected”.

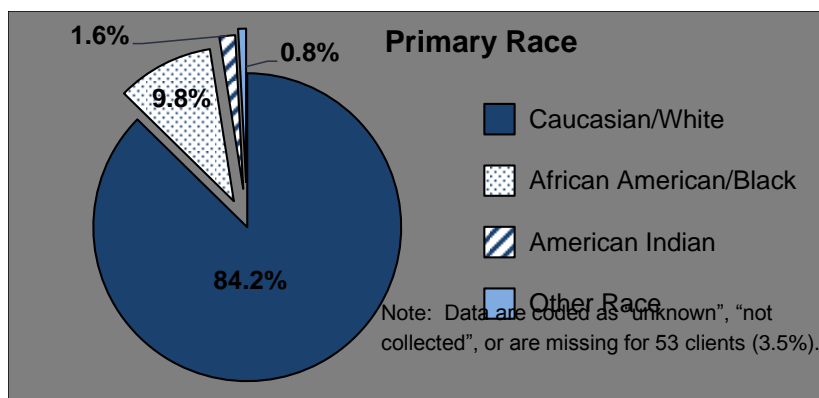
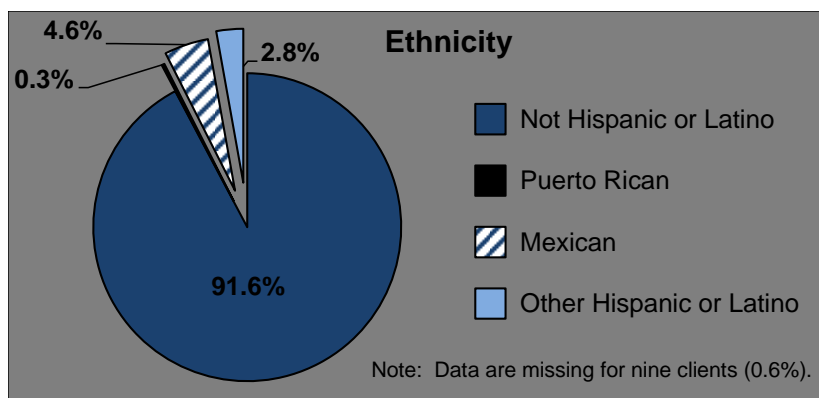


Figure 3. Ethnicity

Figure 3 shows ethnicity reported at admission for the clients in the OMS sample. Hispanic or Latino ethnicity was reported by 116 clients (7.8%) of the clients at admission.



Recruitment, Tracking, and Follow-Up Efforts

As of September 12, 2016, of the 1,494 clients who were selected to participate in the OMS project, 730 individuals had been contacted by Consortium staff and consented to participate in the follow-up interview; 162 clients declined to participate in the project.

Of the 1,494 selected clients, 1,071 clients had reached their window of eligibility for the six-month post-discharge interview. Of these, 419 clients completed a follow-up interview. There were 106 recruited individuals who could not be located for the interview after numerous phone calls, letters, and internet searches. Thirty-eight recruited clients were incarcerated at the time of their interview; Consortium staff do not interview incarcerated individuals. Nine clients chose to withdraw from the project after previously agreeing to participate, interview due dates had already passed for seven recruited clients when the Consortium received notification of their discharge dates, and two recruited clients were deceased when the interview was due. An additional 490 clients were not able to be recruited for various reasons including: 380 clients could not be located; 96 clients were incarcerated; treatment agency staff submitted discharge dates late for 11 non-recruited clients, resulting in the follow-up interview date having already passed when the Consortium received notification; and three clients were deceased.



Efforts are underway to locate and attempt to recruit the 112 clients who are still not eligible for an interview. The remaining 149 individuals who have been recruited and are not yet eligible for an interview are receiving regular update calls from Consortium staff as their interview date nears.

The recruitment rate consists of clients who were successfully recruited (730), those who declined to participate (162), and non-recruited clients whom staff were not able to locate (380). This calculation results in a recruitment rate of 57.4%. Of recruited clients due for a follow-up interview, 78.5% received an interview (419 of 534 clients). This excludes recruited clients who were incarcerated, deceased, and clients whose interview date had already passed when the Consortium received notification. This calculation includes all clients who completed the follow-up interview (419), recruited clients who could not be located when their interview was due (106), and those who decided not to take part in the interview after initially agreeing to do so (9). Detailed tracking information regarding the OMS sample is provided in the Appendix on pages 39 through 44.

Description of Clients Completing Follow-Up Interviews

Of the 419 clients completing a follow-up interview, 295 clients (71.3%) were male and 119 clients (28.7%) were female. This subset of clients ranged from 16 to 72 years in age, with a median age of 32 years. Three hundred forty-nine clients (83.3%) reported their race as Caucasian/White at admission, 43 clients (10.3%) indicated African American/Black, six clients (1.4%) reported American Indian, five clients (1.2%) reported “other race”, and 16 clients (3.8%) clients responded “unknown” when asked about their race or the data are missing or reported as “not collected”. Twenty-nine clients (6.9%) reported Hispanic or Latino ethnicity at admission.

CHANGES FROM ADMISSION TO FOLLOW-UP

Tables 1, 2, and 4 through 13 present admission responses from the 1,494 clients admitted in 2015 in the OMS sample and admission and follow-up responses from clients who have completed follow-up interviews (419 clients). The first column presents all possible responses for the question. The second column presents the admission responses for the 1,494 clients in the sample. The third and fourth columns describe the responses for clients who answered the particular item both at admission and at follow-up (419 clients). Table 3 presents data for a subset of the clients. Admission data are not included in Table 14, which displays education status at follow-up for adults and adolescents who completed the follow-up interview. Some of the more interesting findings are reported below.

- **Primary Substance:** At admission, nearly all clients indicated a primary substance of use. Alcohol was the most common primary substance at admission and follow-up, reported by 35.4% of the 1,494 clients in the OMS sample and by 38.7% at follow-up. Marijuana was the second most commonly reported primary substance at admission and follow-up, followed by methamphetamine.
- **Secondary Substance:** A secondary substance was reported by 64.6% of clients in the OMS sample at admission. Marijuana was the most commonly used secondary substance at admission, indicated by one-quarter of clients (25%) in the OMS sample. Nearly one quarter (23.6%) of clients also reported using more than one substance at follow-up.



However, among 419 clients who completed a follow-up interview, clients reporting “no secondary substance” nearly doubled, increasing from 38.9% at admission to 76.4% at follow-up. At follow-up, alcohol was the most frequently reported secondary substance, followed by marijuana.

- **Arrests:** At admission, over half of the clients (58.8%) in the OMS sample reported one or more arrests in the previous twelve months, 20% of the clients reported arrests in the six months following treatment discharge.
- **Employment:** At admission, fewer than half of the clients (44.9%) in the OMS sample indicated full or part-time employment. At follow-up, approximately two-thirds (66.1%) reported they were employed full or part-time. Among the 419 clients completing the follow-up interview, clients indicating full-time employment increased by over 20 percentage points (93 clients) from admission to follow-up.
- **Taxable Income:** Of clients who reported an income category at both admission and follow-up, there were increases in the number of clients reporting the two highest monthly income categories (\$1001 to \$2000, and over \$2000) at follow-up. There was a decrease (14.7 percentage points) in clients who indicated they had no monthly income: nearly half (51.2%) reported this at admission and just over one-third (36.5%) reported this at follow-up.
- **Hospitalizations Due to a Substance Use Related Problem:** The number of clients who were hospitalized at follow-up compared to admission was reduced by over half. At admission, 42 clients (10%) who completed a follow-up interview reported one or more hospitalizations due to substance use related problems in the six months prior to treatment admission. At follow-up 18 clients (4.3%) indicated reported substance use-related hospitalizations during the six-month post-discharge time period.
- **Attendance at Voluntary Recovery Support Meetings:** Clients reporting attending meetings such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar meetings nearly tripled from admission to follow-up (from 60 clients to 177 clients). Over 40% of clients reported attending meetings during the six months following discharge from treatment.



Table 1. Primary Substance

At admission, all but one client (99.9%) indicated a primary substance of use. Alcohol was the most commonly indicated primary substance at admission and follow-up. Of the 419 clients who completed a follow-up interview, 159 clients (37.9%) reported abstinence during the six months following treatment discharge, thus no primary substance was indicated. Among clients who completed the follow-up interview, there were similar percentages of clients reporting alcohol as the primary substance: 157 clients at admission (37.5%) and 162 clients (38.7%) at follow-up. Marijuana was the second most commonly reported primary substance at admission and follow-up, followed by methamphetamine. At follow-up, there was over a two-fold decrease in clients reporting marijuana as their primary substance compared to admission, from 118 clients (28.2%) to 48 clients (11.5%). Similarly, there was over a three-fold decrease for methamphetamine; the percentage of clients reporting methamphetamine as their primary substance decreased by 17.4 percentage points (from 26% to 8.6%).

Primary Substance	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews	
		Admission percent (n=419)	Follow-Up percent (n=419)
None	0.1 (1)	0.2 (1)	37.9 (159)
Alcohol	35.4 (529)	37.5 (157)	38.7 (162)
Cocaine/Crack	1.5 (23)	1.4 (6)	0.7 (3)
Marijuana/Hashish	29.5 (441)	28.2 (118)	11.5 (48)
Methamphetamine	26.8 (400)	26.0 (109)	8.6 (36)
Heroin	2.2 (33)	2.6 (11)	1.2 (5)
Non-Prescription Methadone	0.1 (1)	0.2 (1)	0.0 (0)
Other Opiates and Synthetics	2.7 (41)	2.1 (9)	0.5 (2)
PCP	0.0 (0)	0.0 (0)	0.0 (0)
Other Hallucinogens	0.2 (3)	0.0 (0)	0.2 (1)
Other Amphetamine	0.3 (5)	0.2 (1)	0.0 (0)
Other Stimulants	0.1 (1)	0.2 (1)	0.0 (0)
Benzodiazepines	0.3 (5)	0.5 (2)	0.2 (1)
Other Tranquilizers	0.0 (0)	0.0 (0)	0.0 (0)
Barbiturates	0.0 (0)	0.0 (0)	0.0 (0)
Other Sedatives and Hypnotics	0.1 (2)	0.2 (1)	0.0 (0)
Inhalants	0.1 (1)	0.2 (1)	0.2 (1)
Over the Counter	0.1 (1)	0.2 (1)	0.2 (1)
Steroids	0.0 (0)	0.0 (0)	0.0 (0)
Ecstasy	0.1 (1)	0.0 (0)	0.0 (0)
Oxycontin	0.3 (5)	0.0 (0)	0.0 (0)
Other Prescribed Analgesics	0.1 (1)	0.0 (0)	0.0 (0)
Other	0.0 (0)	0.0 (0)	0.0 (0)

A client's primary substance may change from admission to follow-up.



Table 2. Secondary Substance

Ninety-nine clients (23.6%) reported using more than one substance six months post discharge. Of the clients completing a follow-up interview, clients reporting no secondary substance nearly doubled, increasing by 37.5 percentage points from 38.9% at admission to 76.4% at follow-up (a difference of 157 clients). Marijuana was the most commonly reported secondary substance at admission, followed by alcohol. However, alcohol was the most commonly reported secondary substance at follow-up, followed by marijuana. There were decreases between admission and follow-up for clients reporting the two most commonly used secondary substances, marijuana and alcohol, 17.9 and 13.1 percentage points respectively.

Secondary Substance	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews	
		Admission percent (n=419)	Follow-Up percent (n=419)
None	35.4 (529)	38.9 (163)	76.4 (320)
Alcohol	22.8 (341)	22.2 (93)	9.1 (38)
Cocaine/Crack	2.1 (32)	2.1 (9)	0.5 (2)
Marijuana/Hashish	25.0 (373)	24.8 (104)	6.9 (29)
Methamphetamine	9.2 (137)	7.2 (30)	4.3 (18)
Heroin	0.7 (10)	0.2 (1)	0.7 (3)
Non-Prescription Methadone	0.1 (1)	0.0 (0)	0.2 (1)
Other Opiates and Synthetics	2.0 (30)	2.6 (11)	0.5 (2)
PCP	0.1 (1)	0.0 (0)	0.0 (0)
Other Hallucinogens	0.4 (6)	0.5 (2)	0.5 (2)
Other Amphetamine	0.5 (8)	0.2 (1)	0.0 (0)
Other Stimulants	0.1 (2)	0.2 (1)	0.0 (0)
Benzodiazepines	0.6 (9)	0.2 (1)	0.7 (3)
Other Tranquilizers	0.0 (0)	0.0 (0)	0.0 (0)
Barbiturates	0.0 (0)	0.0 (0)	0.0 (0)
Other Sedatives and Hypnotics	0.3 (4)	0.2 (1)	0.0 (0)
Inhalants	0.1 (2)	0.0 (0)	0.0 (0)
Over the Counter	0.0 (0)	0.0 (0)	0.0 (0)
Steroids	0.0 (0)	0.0 (0)	0.0 (0)
Ecstasy	0.3 (4)	0.2 (1)	0.0 (0)
Oxycontin	0.1 (1)	0.0 (0)	0.2 (1)
Other Prescribed Analgesics	0.0 (0)	0.0 (0)	0.0 (0)
Other	0.3 (4)	0.2 (1)	0.0 (0)

A client's secondary substance may change from admission to follow-up.



Changes in frequency of use provide additional information regarding client outcomes following treatment. Since a client’s primary substance may change from admission to follow-up, a simple comparison of frequency may not provide a good representation (e.g. having one drink three to six times per week versus smoking methamphetamine three to six times per week). Therefore, Table 3 presents data for a subset of the total group of clients who completed the follow-up interview who report using the same primary substance at both admission and follow-up. For example, a client may report using alcohol daily at admission and at follow-up report they used alcohol one to three times in the past month, representing a decrease in their frequency of use. Of the 260 clients reporting substance use during the six-month post-discharge time period, 133 clients (51.2%) reported the same primary substance at both admission and follow-up and 126 clients (48.5%) reported a different primary substance at follow-up than the primary substance reported at admission. One client who indicated use at follow-up did not report a primary substance report at treatment admission.

Table 3. Frequency of Use of Primary Substance: Clients Indicating Use of Same Primary Substance at Both Admission and Follow-Up

Table 3 presents the change in frequency of use from admission to follow-up for individuals who reported the same primary substance at both admission and follow-up, and includes *only* clients who reported use at follow-up (therefore excludes clients who reported abstinence at follow-up). The “Increased Use” category presents the percentage of clients who indicated using their primary substance with more frequency at follow-up than reported at admission. “Maintained Same Use” represents clients reporting the same frequency of use of their primary substance at admission and follow-up. “Decreased Use” presents the percentage of clients who reported using their primary substance with less frequency at follow-up than indicated at admission.

This subgroup of 133 clients most commonly reported using their primary substance less frequently at follow-up compared to admission (42.9%); 34.6% reported an increase in use of their primary substance at follow-up; and 22.6% of clients in this group indicated the same use pattern of their primary substance at both admission and follow-up.

Change in Frequency of Use	OMS Sample with Completed Follow-up Interviews Clients Reporting Same Primary Substance at Admission and Follow-Up percent (n=133)
Increased Use	34.6 (46)
Maintained Same Use	22.6 (30)
Decreased Use	42.9 (57)

In addition to the 133 clients represented in Table 3 above, 126 of the interviewed clients reported using a different primary substance at follow-up than the primary substance they reported at admission (therefore they are not included in Table 3 above). Half of the 126 clients (63 clients, 50%) identified their primary substance at follow-up was the substance they originally reported as their secondary substance at admission. Of the 126 individuals in this group, 54 clients (42.9%) switched from marijuana to alcohol; 23 clients (18.3%) changed from methamphetamine to alcohol; and 15 clients (11.9%) switched from alcohol to marijuana.



Table 4. Attendance at Voluntary Recovery Support Meetings

Of clients with completed follow-up interviews, 117 more clients reported attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar voluntary meetings for recovery at follow-up than at admission. The number of clients reporting attending meetings increased nearly three times from admission to follow-up with over 40% of clients reported attending meetings during the six months following discharge from treatment.

Average Number of Meetings Attended Per Month	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
None	82.8 (1,237)	85.7 (359)	57.8 (242)	-27.9
1 to 10 Meetings	14.3 (214)	12.6 (53)	32.0 (134)	+19.3
11 or More Meetings	2.9 (43)	1.7 (7)	10.3 (43)	+8.6

Table 5. Arrests

For the question regarding arrests, the admission response refers to the 12 months prior to admission and the follow-up response refers to the six months following discharge. Among clients with completed follow-up interviews, over 55% of clients reported arrests at admission, whereas 20% reported arrests at follow-up.

Number of Arrests	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews	
		Admission percent (n=419)	Follow-Up percent (n=419)
None	41.2 (616)	43.9 (184)	80.0 (335)
1 to 3 Times	54.3 (811)	52.5 (220)	19.6 (82)
4 or More Times	4.5 (67)	3.6 (15)	0.5 (2)

Note: Since the admission and follow-up questions cover different periods (12 months and six months respectively), a direct comparison between the two is not recommended.

Table 6. Hospitalizations Due to a Substance Use Related Problem

Overall, fewer clients reported substance use related hospitalizations at follow-up compared to admission. At follow-up, 18 clients (4.3%) reported hospitalizations for substance use related problems since discharge, whereas over 10% of interviewed clients (42 clients) indicated substance use related hospitalizations in the six months prior to treatment admission.

Number of Hospitalizations	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
None	91.5 (1,367)	90.0 (377)	95.7 (401)	+5.7
1 to 3 Times	7.8 (117)	9.1 (38)	4.3 (18)	-4.8
4 or More Times	0.7 (10)	1.0 (4)	0.0 (0)	-1.0

Table 7. Employment Status

At follow-up, approximately two-thirds of the clients (277 clients, 66.1%) reported they were employed full or part-time. Among clients with completed follow-up interviews, full-time employment increased from 113 clients at admission to 206 clients at follow-up (by over 20 percentage points). There was over a two-fold decrease in the number of clients reporting they were unemployed (looking for work in the past 30 days) from admission to follow-up, from 173 clients to 81 clients. Individuals categorized as not being in the labor force are clients who are not employed and not seeking employment; the category includes, but is not limited to, homemakers, students, and retired or disabled clients.

Employment Status	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
Employed Full-Time (≥ 35 hrs/wk)	31.3 (468)	27.0 (113)	49.2 (206)	+22.2
Employed Part-Time (<35 hrs/wk)	13.6 (203)	14.6 (61)	16.9 (71)	+2.4
Unemployed (Looking For Work in the Past 30 Days)	38.8 (580)	41.3 (173)	19.3 (81)	-22.0
Not in Labor Force	16.3 (243)	17.2 (72)	14.6 (61)	-2.6

Table 8. Months Employed

At follow-up, nearly 60% of the clients reported employment of four months or more in the past six months. Clients reporting no employment in the previous six months decreased by nearly half, from 168 clients at admission to 86 clients at follow-up.

Months Employed	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
None	38.6 (576)	40.1 (168)	20.5 (86)	-19.6
Three Months or Less	20.1 (301)	17.9 (75)	20.0 (84)	+2.1
Four or More Months	41.3 (617)	42.0 (176)	59.4 (249)	+17.4

Table 9. Taxable Monthly Income

There were increases in the number of clients reporting monthly income in the two highest income categories (\$1001 to \$2000 and over \$2000) at follow-up. Over 40% of clients indicated their taxable monthly income at follow-up was over \$1000. There was a decrease of 55 clients (14.7 percentage points) in clients who indicated they had no monthly income from admission to follow-up, likely corresponding to the previous findings (Table 7 on previous page) that more clients were employed at follow-up.

Taxable Monthly Income	OMS Sample at Admission percent (n=1,468)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=373)	Follow-Up percent (n=373)	Percentage Point Change
None	48.0 (705)	51.2 (191)	36.5 (136)	-14.7
\$500 or Less	7.3 (107)	7.0 (26)	3.5 (13)	-3.5
\$501 to \$1000	14.3 (210)	12.9 (48)	11.8 (44)	-1.1
\$1001 to \$2000	22.5 (330)	20.1 (75)	26.8 (100)	+6.7
Over \$2000	7.9 (116)	8.8 (33)	21.4 (80)	+12.6

*Data for 26 clients in the "OMS Sample at Admission" column are excluded from this table due to records coded as not applicable, disabled, retired, or client declines to disclose income. Data from 46 clients in the "OMS Sample with Completed Follow-Up Interviews" columns are excluded due to admission record coded as not applicable, disabled, retired, or client declines to disclose income or clients at follow-up reporting variability of income (due to contractual or seasonal work or commission-based pay) or declining to disclose their income.

Table 10. Primary Source of Support

At both admission and follow-up, the “wages/salary” category was the most common primary source of support. From admission to follow-up, clients reporting “wages/salary” as their primary means of support increased by over 14 percentage points (by 59 clients). Very few clients (seven clients, 1.7%) reported “none” as their primary source of support at follow-up compared to 89 clients (21.2%) reporting this at admission.

Primary Source of Support	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
None	24.9 (372)	21.2 (89)	1.7 (7)	-19.6
Wages/Salary	46.3 (691)	43.4 (182)	57.5 (241)	+14.1
Family/ Friends	18.2 (272)	22.4 (94)	24.8 (104)	+2.4
Public Assistance	0.8 (12)	1.0 (4)	3.1 (13)	+2.1
Retirement/ Pension	0.7 (10)	1.0 (4)	1.9 (8)	+1.0
Disability	2.5 (37)	3.1 (13)	4.5 (19)	+1.4
SSI or SSDI	1.7 (25)	2.6 (11)	1.7 (7)	-1.0
Other	5.0 (75)	5.3 (22)	4.8 (20)	-0.5

Table 11. Days Missed of Work or School Due to Substance Use

The admission dataset does not provide a response category for “not applicable” for the question regarding days missed of school or work due to substance use for clients who indicate they are not in the labor force or enrolled in school in the six months preceding admission. At follow-up, records for clients reporting no employment or school in enrollment in the six-month post-discharge period are coded as “not applicable.” Therefore, both admission and follow-up data for clients completing follow-up interviews are excluded in the third and fourth columns of Table 11 for clients who indicated they were not in the labor force or enrolled in school in the last six months at the follow-up interview.

Days Missed	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=340)*	Follow-Up percent (n=340)*	Percentage Point Change
Zero Days	89.7 (1,340)	87.6 (298)	90.6 (308)	+2.9
1 to 5 Days	4.9 (73)	5.9 (20)	7.4 (25)	+1.5
6 or More Days	5.4 (80)	6.5 (22)	2.1 (7)	-4.4

*Data from 79 clients in the “OMS Sample with Completed Follow-Up Interviews” columns are excluded for clients who indicated no employment or school enrollment at follow-up. The admission dataset does not provide a response category for “not applicable” for clients who indicate they are not in the labor force or enrolled in school in the six months preceding admission.



Table 12. Relationship Status

The most common response for relationship status at admission and follow-up was “single.” “Divorced” was the second most common response at admission and “cohabitating” was the second most common response at follow-up. Of those who completed follow-up interviews, clients reporting “cohabitating” quadrupled from admission to follow-up (from 20 to 80 clients).

Relationship Status	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
Single	57.3 (856)	54.7 (229)	47.5 (199)	-7.2
Married	10.9 (163)	12.2 (51)	12.6 (53)	+0.5
Cohabitating	7.4 (111)	4.8 (20)	19.1 (80)	+14.3
Separated	6.6 (98)	5.7 (24)	3.8 (16)	-1.9
Divorced	16.7 (250)	21.2 (89)	16.0 (67)	-5.3
Widowed	1.1 (16)	1.4 (6)	1.0 (4)	-0.5

Table 13. Living Arrangements

The most common living arrangement reported by clients at both admission and follow-up was living with their parents, indicated by over one-fifth of clients. Among clients with completed interviews, living alone was the second most common living arrangement at admission and follow-up.

Living Arrangements	OMS Sample at Admission percent (n=1,494)	OMS Sample with Completed Follow-Up Interviews		
		Admission percent (n=419)	Follow-Up percent (n=419)	Percentage Point Change
Alone	14.5 (217)	18.6 (78)	18.9 (79)	+0.2
Parents	22.9 (342)	20.8 (87)	21.2 (89)	+0.5
Significant Other Only	10.4 (155)	13.6 (57)	14.3 (60)	+0.7
Significant Other and Child(ren)	11.2 (167)	11.0 (46)	15.0 (63)	+4.1
Child(ren) Only	2.5 (37)	3.1 (13)	6.0 (25)	+2.9
Other Adults	18.4 (275)	17.7 (74)	13.1 (55)	-4.5
Other Adults and Child(ren)	3.3 (49)	4.1 (17)	3.8 (16)	-0.2
Jail, Correctional Facility, Juvenile Detention	6.1 (91)	4.1 (17)	0.0 (0)	-4.1
Child/Adolescent Foster Care	0.1 (2)	0.5 (2)	0.0 (0)	-0.5
Halfway House, Group Home, Transitional Housing*	7.6 (113)	3.1 (13)	6.7 (28)	+3.6
Shelter, Homeless	3.1 (46)	3.6 (15)	1.0 (4)	-2.6

*Included in the halfway house category are clients living in substance use disorder halfway houses, correctional halfway houses, and transitional housing facilities.

Table 14. Education at Follow-Up

Admission data are not included in Table 14. The admission dataset does not provide a response category for a General Education Degree (GED), therefore admission and follow-up comparison cannot be made because the GED question is specifically asked at follow-up. Table 14 provides education status at follow-up by age indicated at admission. Age is separated into two groups: adults (18 and older) and adolescents (17 and younger). Over 50% of adults have an education level of high school only at follow-up and over one-third of adults (38.3%) reported an education level beyond high school. Fewer than 10% of adults reported they did not graduate high school.

Level of Education	OMS Sample with Completed Follow-Up Interviews n=419	
	Adults percent (n=412)	Adolescents percent (n=7)
Did Not Graduate High School	9.5 (39)	57.1 (4)
High School Only *	52.2 (215)	42.9 (3)
1 to 3 Years Post-Secondary Education	29.4 (121)	0.0 (0)
4 or More Years Post-Secondary Education	9.0 (37)	NA

*Clients who receive a General Education Degree (GED) are grouped with clients in the “High School Only” category.

OUTCOMES: ABSTINENCE

Tables 15 through 23 examine abstinence at follow-up in relation to other variables at admission and follow-up. Abstinence refers to abstinence from all substances in the previous six months (follow-up period). The follow-up interviews occur approximately six months after the client was discharged from treatment; therefore, the follow-up period refers to the six months between the client’s discharge from treatment and the follow-up interview.

Table 15 on the following page presents the percentages of clients who had no substance use during the follow-up period for each primary substance reported at admission. The numbers in parentheses represent the number of clients who were abstinent out of the number of total clients who indicated each primary substance at admission. For example, 60 of the 157 clients (percent = 38.2%) who reported alcohol as the primary substance at admission were abstinent at follow-up. Data in Tables 16 through 23 in the “abstinent” and “non-abstinent” columns are presented in the same manner. In Table 15, it is important to note the variability in the percentages of clients abstaining from certain substances can be due to varying numbers of clients participating in the follow-up interview who reported these substances at admission. For example, only one person who completed the follow-up interview reported other amphetamines as a primary substance, compared to 157 people who reported alcohol.



Table 15. Primary Substance at Admission by Abstinence at Follow-Up

Of the 109 clients who reported methamphetamine as their primary substance at admission, nearly half (53 clients, 48.6%) were abstinent at follow-up. Sixty of the 157 clients (38.2%) who indicated alcohol as their primary substance at admission abstained during the follow-up period and 36 of the 118 clients (30.5%) who indicated marijuana as their primary substance at admission were abstinent during the follow-up period. There is a statistically significant association between primary substance at admission and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.05$). Clients who indicated methamphetamine as the primary substance at admission have a higher abstinence rate (48.6%) at follow-up than clients reporting alcohol and marijuana (38.2% and 30.5% respectively).

Primary Substance at Admission*	OMS Sample Abstinence at Follow-Up percent (n=419)
Alcohol	38.2 (60/157)
Cocaine/Crack	66.7 (4/6)
Marijuana/Hashish	30.5 (36/118)
Methamphetamine	48.6 (53/109)
Heroin	0.0 (0/11)
Non-Prescription Methadone	0.0 (0/1)
Other Opiates and Synthetics	55.6 (5/9)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	0.0 (0/1)
Other Stimulants	0.0 (0/1)
Benzodiazepines	50.0 (1/2)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	0.0 (0/1)
Inhalants	0.0 (0/1)
Over the Counter	0.0 (0/1)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	0.0 (0/0)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)
No Primary Substance Reported	0.0 (0/1)

*Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.05$).



In Tables 16 through 23 on the following pages, the percentages and the N for each response in the “Abstinent” column represent the number of clients responding out of the total number of abstinent clients; the percentages and N in the “Non-Abstinent” column represent the number of clients responding out of the total number of non-abstinent clients. Of the 419 clients who completed a follow-up interview, 159 clients (37.9%) were abstinent and 260 clients (62.1%) were not abstinent.

Table 16. Employment at Follow-Up by Abstinance at Follow-Up

Table 16 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by employment status reported at follow-up. There is no statistically significant association between abstinence and employment at follow-up (Cochran-Mantel-Haenszel Correlation Test, $p > 0.05$).

Employment Status	OMS Sample at Follow-Up n=419	
	Abstinent percent (n=159)	Non-Abstinent percent (n=260)
Employed Full-Time (≥ 35 hrs/wk)	54.1 (86)	46.2 (120)
Employed Part-Time (<35 hrs/wk)	17.6 (28)	16.5 (43)
Unemployed (looking for work in the past 30 days)	13.8 (22)	22.7 (59)
Not in Labor Force	14.5 (23)	14.6 (38)

Table 17. Change in Employment Status from Admission to Follow-Up by Abstinance at Follow-Up

Table 17 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by the change in employment status from admission to follow-up. Increased employment includes clients who changed from not being in the labor force or were unemployed at admission to having any employment at follow-up, or those who changed from being employed part-time at admission to full-time at follow-up. Decreased employment includes clients who changed from having any employment at admission to being unemployed or not in the labor force at follow-up, or those who changed from being employed full-time at admission to part-time at follow-up. There is no statistically significant association between abstinence and change in employment status at follow-up (Chi Square Test, $p > 0.05$).

Change in Employment Status	OMS Sample at Follow-Up n=419	
	Abstinent percent (n=159)	Non-Abstinent percent (n=260)
Increased Employment	44.7 (71)	38.8 (101)
Maintained Full-Time Employment	21.4 (34)	18.1 (47)
Maintained Part-Time Employment	3.1 (5)	5.8 (15)
Remained Unemployed	8.2 (13)	15.4 (40)
Remained Not in the Labor Force	7.5 (12)	7.7 (20)
Decreased Employment	15.1 (24)	14.2 (37)

Table 18. Living Arrangements at Follow-Up by Abstinence at Follow-Up

Table 18 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by living arrangements reported at follow-up. There is not a statistically significant association between abstinence and living arrangements at follow-up (Likelihood Ratio Chi-Square Test, $p > 0.05$).

Living Arrangements	OMS Sample at Follow-Up n=419	
	Abstinent percent (n=159)	Non-Abstinent percent (n=260)
Alone	15.1 (24)	21.2 (55)
Parents	18.2 (29)	23.1 (60)
Significant Other Only	15.7 (25)	13.5 (35)
Significant Other and Child(ren)	18.9 (30)	12.7 (33)
Child(ren) Only	8.8 (14)	4.2 (11)
Other Adults	11.3 (18)	14.2 (37)
Other Adults and Child(ren)	3.8 (6)	3.8 (10)
Jail/Correctional Facility	0.0 (0)	0.0 (0)
Halfway House, Group Home, Transitional Housing*	7.5 (12)	6.2 (16)
Homeless, Shelter	0.6 (1)	1.2 (3)
Hospital	0.0 (0)	0.0 (0)

*Included in the halfway house category are clients living in substance use disorder halfway houses, correctional halfway houses, and transitional housing facilities.

Table 19. Monthly Income at Follow-Up by Abstinence at Follow-Up

Table 19 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by monthly income reported at follow-up. There is not a statistically significant association between abstinence and monthly income at follow-up (Jonckheere-Terpstra Test, $p > 0.05$).

Monthly Income	OMS Sample at Follow-Up n=375	
	Abstinent percent (n=140)	Non-Abstinent percent (n=235)
None	31.4 (44)	39.6 (93)
\$500 or less	4.3 (6)	3.0 (7)
\$501 to \$1000	10.0 (14)	12.8 (30)
\$1001 to \$2000	32.1 (45)	23.4 (55)
Over \$2000	22.1 (31)	21.3 (50)

Note: Data from 46 clients who completed a follow-up interview are excluded due to clients at follow-up reporting variability of income (due to contractual/seasonal work or commission based pay) or declining to disclose their income.

Table 20. Change in Income from Admission to Follow-Up by Abstinence at Follow-Up

Table 20 presents a comparison of clients who were abstinent versus clients who were not abstinent at follow-up by the change in income from admission to follow-up. “Increased Monthly Income” indicates clients have moved from a smaller income category at admission to a larger income category at follow-up. “Decreased Monthly Income” represents clients who have moved from a larger income category at admission to a smaller income category at follow-up. There is not a statistically significant association between abstinence and change in income level at follow-up (Chi Square Test, $p > 0.05$).

Change in Monthly Income	OMS Sample at Follow-Up n=373	
	Abstinent percent (n=140)	Non-Abstinent percent (n=233)
Increased Monthly Income	51.4 (72)	41.2 (96)
Maintained Over \$2000	2.9 (4)	6.4 (15)
Maintained \$1001 to \$2000	6.4 (9)	6.0 (14)
Maintained \$501 to \$1000	1.4 (2)	3.9 (9)
Maintained \$500 or Less	0.0 (0)	0.4 (1)
Maintained No Income	17.1 (24)	21.5 (50)
Decreased Monthly Income	20.7 (29)	20.6 (48)

Note: Data from 46 clients who completed a follow-up interview are excluded due to clients at follow-up reporting variability of income (due to contractual/seasonal work or commission based pay) or declining to disclose their income.

Table 21. Primary Income Source at Admission and Follow-Up by Abstinence at Follow-Up

Table 21 presents responses for primary income source at both admission and follow-up for clients who completed the follow-up interview. The second and third columns list the percentage of abstinent and non-abstinent clients at follow-up by income source at admission. The fourth and fifth columns list the percentage of abstinent and non-abstinent clients at follow-up by income source at follow-up. At both admission and follow-up, the most common income source reported by abstinent and non-abstinent clients was “wages/salary.” There are no statistically significant associations between abstinence and primary income source at both admission and follow-up (Likelihood Ratio Chi-Square Test, $p > 0.05$).

Primary Income Source	OMS Sample at Follow-Up n=419			
	Primary Income Source at Admission		Primary Income Source at Follow-Up	
	Abstinent percent (n=159)	Non-Abstinent percent (n=260)	Abstinent percent (n=159)	Non-Abstinent percent (n=260)
None	23.9 (38)	19.6 (51)	2.5 (4)	1.2 (3)
Wages/Salary	40.9 (65)	45.0 (117)	62.3 (99)	54.6 (142)
Family/Friends	22.0 (35)	22.7 (59)	22.0 (35)	26.5 (69)
Public Assistance	1.3 (2)	0.8 (2)	3.8 (6)	2.7 (7)
Retirement/Pension	1.3 (2)	0.8 (2)	1.9 (3)	1.9 (5)
Disability	2.5 (4)	3.5 (9)	4.4 (7)	4.6 (12)
SSI and SSDI	2.5 (4)	2.7 (7)	1.3 (2)	1.9 (5)
Other	5.7 (9)	5.0 (13)	1.9 (3)	6.5 (17)

Table 22. Arrests at Follow-Up by Abstinence at Follow-Up

There is a statistically significant difference between abstinence and arrest categories at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.05$). The percentage of abstinent clients who reported no arrests during the follow-up period (86.2%) was higher than the percentage of non-abstinent clients who reported no arrests (76.2%). The number of non-abstinent clients who reported one or more arrests at follow-up (62 clients) was over two and a half times higher than the number of the abstinent clients (22 clients) reporting arrests.

Arrests*	OMS Sample at Follow-Up n=419	
	Abstinent percent (n=159)	Non-Abstinent percent (n=260)
None	86.2 (137)	76.2 (198)
1 to 3 Times	13.8 (22)	23.1 (60)
4 or More Times	0.0 (0)	0.8 (2)

*Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.05$).

Table 23. Voluntary Recovery Support Meetings Attended at Follow-Up by Abstinence at Follow-Up

Of the 419 clients who completed a follow-up interview, 177 clients (42.2%) reported attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar voluntary meetings for recovery in the six months following discharge. There is no statistically significant association between meeting attendance and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Average Number of Meetings Attended Per Month	OMS Sample at Follow-Up N=419	
	Abstinent percent (n=159)	Non-Abstinent percent (n=260)
None	52.8 (84)	60.8 (158)
1 or More Meetings	47.2 (75)	39.2 (102)

OUTCOMES: ARRESTS AND EMPLOYMENT

Table 24 on the following page examines arrests at follow-up in relation to primary substance at admission. For this table, clients were categorized as having no arrests since discharge or having one or more arrests since discharge from treatment. The percentages of clients who reported no arrest during the follow-up period for each primary substance reported at admission are presented. The numbers in parentheses represent the number of clients who indicated they were not arrested at follow-up out of the number of total clients who indicated that substance at admission. As previously stated, it is important to note in Tables 24 and 25 that the variability in the percentages of clients abstaining from certain substances can be due to varying numbers of clients participating in the follow-up interview who reported these substances at admission, only one person who completed the follow-up interview reported other amphetamines as a primary substance, compared to 157 people who reported alcohol.

Table 24. No Arrests at Follow-Up by Primary Substance at Admission

Of the 157 clients who reported alcohol as the primary substance at admission, 135 clients (86%) were arrest-free at follow-up. Additionally, 92 of the 118 clients (78%) indicating marijuana as the primary substance at admission and 85 of the 109 clients (78%) reporting methamphetamine as the primary substance at admission were arrest-free. There is not a statistically significant association between primary substance at admission and no arrests at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Primary Substance at Admission	OMS Sample No Arrests at Follow-Up percent (n=419)
Alcohol	86.0 (135/157)
Cocaine/Crack	66.7 (4/6)
Marijuana/Hashish	78.0 (92/118)
Methamphetamine	78.0 (85/109)
Heroin	54.5 (6/11)
Non-Prescription Methadone	0.0 (0/1)
Other Opiates and Synthetics	66.7 (6/9)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	100.0 (1/1)
Other Stimulants	100.0 (1/1)
Benzodiazepines	100.0 (2/2)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	100.0 (1/1)
Inhalants	0.0 (0/1)
Over the Counter	100.0 (1/1)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	0.0 (0/0)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)
No Primary Substance Reported	100.0 (1/1)

Table 25 examines employment status at follow-up in relation to primary substance reported at admission. For this table, clients were categorized as being employed (full or part-time) at follow-up, or not being employed at follow-up. The percentages of clients who reported they were employed at follow-up for each primary substance are presented. The numbers in parentheses represent the number of clients who were employed at follow-up out of the number of total clients who indicated that substance at admission.

Table 25. Employment at Follow-Up by Primary Substance at Admission

Six months following discharge, 81 of the 118 clients (68.6%) reporting marijuana as the primary substance at admission were employed. In addition, 74 of the 109 clients (67.9%) indicating methamphetamine and 99 of the 157 clients (63.1%) reporting alcohol were employed at follow-up. There is not a significant difference between employment at follow-up and primary substance reported at admission (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Primary Substance at Admission	OMS Sample Employed at Follow-Up percent (n=419)
Alcohol	63.1 (99/157)
Cocaine/Crack	50.0 (3/6)
Marijuana/Hashish	68.6 (81/118)
Methamphetamine	67.9 (74/109)
Heroin	81.8 (9/11)
Non-Prescription Methadone	0.0 (0/1)
Other Opiates and Synthetics	66.7 (6/9)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	0.0 (0/1)
Other Stimulants	100.0 (1/1)
Benzodiazepines	100.0 (2/2)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	100.0 (1/1)
Inhalants	0.0 (0/1)
Over the Counter	0.0 (0/1)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	0.0 (0/0)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)
No Primary Substance Reported	100.0 (1/1)



OUTCOMES: SEX

Figures 4 and 5 present selected variables at admission and follow-up presented by sex. Of the 419 clients who completed the follow-up interview, 300 were males (71.6%) and 119 were females (28.4%). The variables presented include primary substance at admission and follow-up and frequency of use of primary substance for individuals who reported using the same primary substance at both admission and follow-up.

The three primary substances clients reported most often at admission and follow-up were alcohol, marijuana, and methamphetamine (see Table 1 on page 7). Figure 4 shows the percentage of males and females reporting these three substances. The following primary substances are grouped together in the “other substances” category: cocaine/crack, heroin, non-prescription methadone, other opiates and synthetics, other hallucinogens, other amphetamines, other stimulants, benzodiazepines, other sedatives and hypnotics, ecstasy, Oxycontin, and substances included in the other category.

Figure 4. Primary Substance at Admission and Follow-up by Sex

At follow-up, a higher percentage of females (46.2%) than males (34.7%) reported abstinence during the six months following discharge from treatment. At admission and follow-up, there were higher percentages of males than females indicating alcohol and marijuana as their primary substance, while a higher percentage of females than males reported methamphetamine as their primary substance at both admission and follow-up.

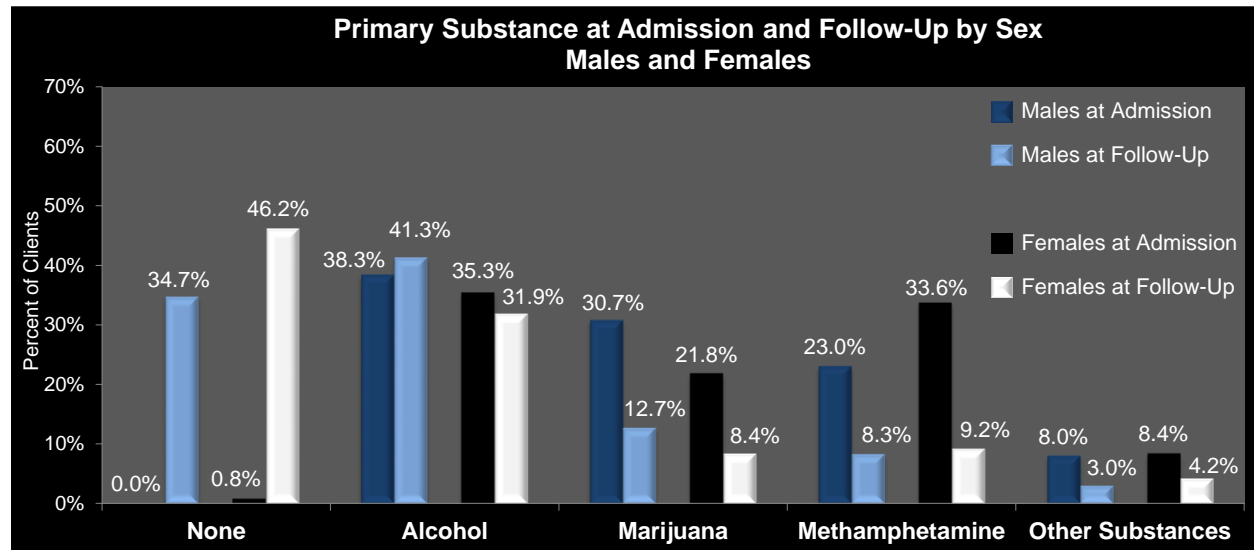
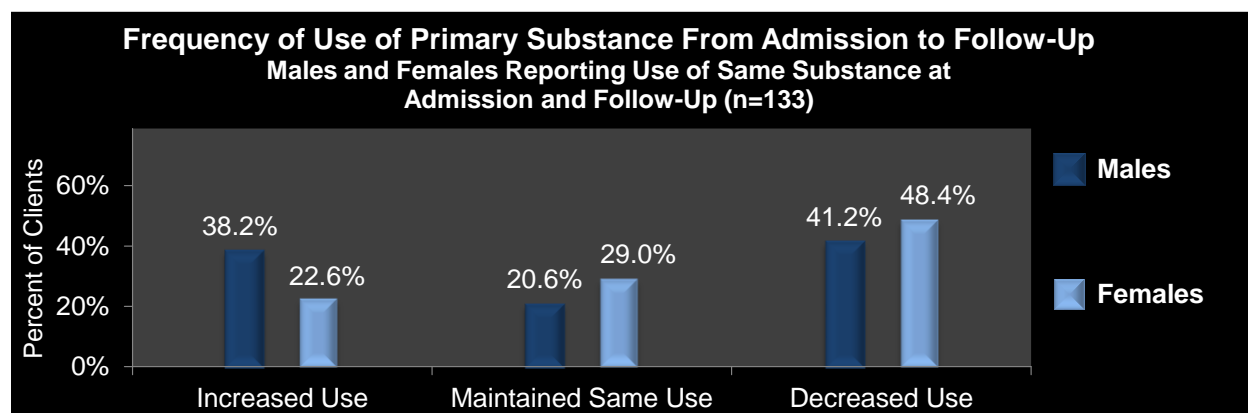


Figure 5 on the following page is a subset of the total group of clients who completed the follow-up interview and presents frequency of use data for individuals who reported using the same primary substance at both admission and follow-up by sex; the figure includes *only* clients who reported use at follow-up. Figure 5 presents the change in frequency of use from admission to follow-up for this subgroup of 133 clients. It is important to note that of the 133 individuals, 102 clients (76.7%) were male and 31 clients (23.3%) were female.

Figure 5. Frequency of Use of Primary Substance by Sex: Clients Indicating Use of Same Primary Substance at Both Admission and Follow-Up

For individuals who indicated using the same primary substance at both admission and follow-up, six months following treatment discharge, more males than females reported an increase in use of their primary substance from admission to follow-up (38.2% and 22.6% respectively). More females (29%) reported the same frequency of use at both admission and follow-up compared to males (20.6%). More females (48.4%) reported a decrease in use of their primary substance from admission to follow-up compared to males (41.2%).



LENGTH OF STAY AND DISCHARGE STATUS

Length of stay is defined as the number of days from admission through discharge. This section examines length of stay related to three outcome variables at follow-up (abstinence, arrests, and employment), discharge status by the three outcome variables, and length of stay by primary substance at admission.

In Table 26 on the following page, the first column presents the length of stay categories; the second column presents the number of clients with completed follow-up interviews in each length of stay category. The third column presents the percentage and number of clients who had no substance use during the follow-up period for each length of stay range. For example, 10 of the 27 clients (37%) who were in treatment less than seven days were abstinent at follow-up. Data in the “no arrests” and “employed” columns are presented in the same manner as the “abstinent” column.

Table 26. Length of Stay by Outcome Variables at Follow-Up

The two most common length of stay categories for clients who completed the follow-up interview were more than 120 days (97 clients, 23.2%) in this category and 7 - 30 days (93 clients, 22.2%). There are statistically significant associations between length of stay and abstinence (Jonckheere-Terpstra Test, $p < 0.001$), as well as length of stay and employment at follow-up (Jonckheere-Terpstra Test, $p < 0.05$). Nearly one-half of the clients who reported abstinence at follow-up received treatment for more than 90 days (69 of 141 clients, 48.9%, abstinent at follow-up). Over two-thirds of clients who received treatment for more than 90 days were employed at follow-up (101 of 141 clients, 71.6%). There is no statistically significant association between length of stay and arrests at follow-up (Jonckheere-Terpstra Test, $p > 0.05$).

OMS Sample at Follow-Up n=419				
Length Of Stay	n	Abstinent* percent (n)	No Arrests percent (n)	Employed** percent (n)
Less Than 7 Days	27	37.0 (10)	59.3 (16)	51.9 (14)
7 - 30 Days	93	24.7 (23)	74.2 (69)	59.1 (55)
31 - 60 Days	79	26.6 (21)	87.3 (69)	68.4 (54)
61 - 90 Days	79	45.6 (36)	84.8 (67)	67.1 (53)
91 - 120 Days	44	50.0 (22)	81.8 (36)	72.7 (32)
More Than 120 Days	97	48.5 (47)	80.4 (78)	71.1 (69)

*Statistically significant (Jonckheere-Terpstra Test, $p < 0.001$).

** Statistically significant (Jonckheere-Terpstra Test, $p < 0.05$).

Table 27 on the following page shows the three outcome variables for the follow-up interview (abstinence, no arrests, employment) by treatment discharge status. There are three discharge categories: successful completion; terminated (clients discharged from the program due to noncompliance, lack of treatment progress, or client leaving); and neutral (this category includes, but is not limited to, managed care decision, referral to another program, incarceration, or death). The first column presents the discharge categories. The second column presents the number of clients with completed follow-up interviews in each discharge category. The third column presents the percentage and number of clients who reported abstinence at follow-up (had no substance use during the follow-up period) for each discharge category. For example, 97 of the 255 clients (38%) who were successfully discharged were abstinent at follow-up. Data in the “no arrests” and “employed” columns are presented in the same manner as the “abstinent” column. It is important to note clients who were successfully discharged comprise the majority of the clients interviewed: 61% of the clients in Table 27.

Table 27. Discharge Status by Outcome Variables at Follow-Up

Four hundred eighteen clients who completed a follow-up interview are represented in Table 27, the reason for discharge is missing for one client. Two hundred fifty-five clients (61%) were discharged as successful cases and 163 clients (39%) did not successfully complete the treatment program. Of the 163 clients who did not complete treatment, 129 were terminated and 34 were neutral discharges. There are statistically significant associations between discharge status and no arrests at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$) and discharge status and employment at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.0001$). Clients who were successfully discharged were more likely to be arrest-free in the six-month post-discharge period and employed at follow-up, 85.5% and 75.3% respectively. There is no significant association between discharge status and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

OMS Sample at Follow-Up n=418*				
Discharge Status	n	Abstinent percent (n)	No Arrests** percent (n)	Employed*** percent (n)
Successful Completion	255	38.0 (97)	85.5 (218)	75.3 (192)
Terminated	129	33.3 (43)	70.5 (91)	52.7 (68)
Neutral Discharge	34	52.9 (18)	73.5 (25)	50.0 (17)
All Clients at Follow-Up		37.8 (158)	79.9 (334)	66.3 (277)

*Data for the reason for discharge are missing for one client.

**Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.01$).

***Statistically significant (Cochran-Mantel-Haenszel Test, $p < 0.0001$).

Unlike previous tables in this section that include data only from clients who completed follow-up interviews, data in Figure 6 and Table 28 on the following page are drawn from all discharged clients who were in the 2015 OMS sample. As of September 12th, 2016, of the 1,494 clients in the OMS sample, discharge information had been received for 1,384 clients and 110 were still receiving treatment services. The most often reported primary substances at admission are alcohol, marijuana, and methamphetamine (see Table 1, page 7). Figure 6 presents the median length of stay for discharged clients for each of the three primary substances reported at admission. Table 28 presents the percentage of clients in each length of stay category for the three substances.

Figure 6. Median Length of Stay by Primary Substance at Admission

Clients whose primary substance at admission was marijuana had a median length of stay of 70 days. Clients who indicated alcohol as the primary substance at admission had a median length of stay of 64 days. Clients whose primary substance at admission was methamphetamine had a median length of stay of 56 days.

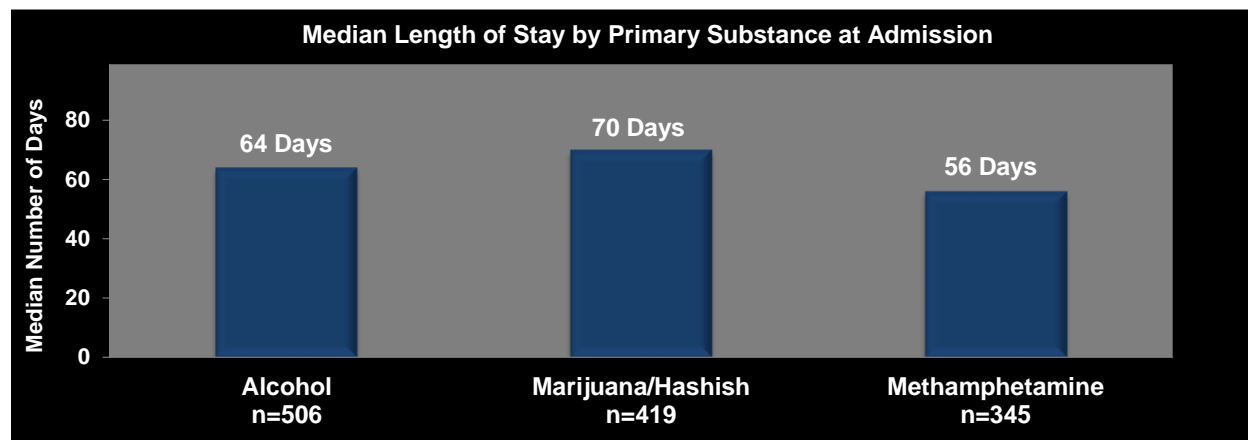


Table 28. Length of Stay by Primary Substance at Admission

There are statistically significant trends between length of stay and marijuana as the primary substance reported at admission (Jonckheere-Terpstra Test, $p < 0.05$) as well as length of stay and the primary substance at admission of methamphetamine (Jonckheere-Terpstra Test, $p < 0.05$). Over one-quarter of clients (25.3%) reporting marijuana as the primary substance at admission had a length of stay of more than 120 days. Showing a similar trend, approximately one-fourth of clients (24.3%) indicating methamphetamine as the primary substance at admission were in treatment more than 120 days. There is no statistically significant trend between length of stay and alcohol as the primary substance reported at admission (Jonckheere-Terpstra Test, $p > 0.05$).

Primary Substance at Admission	n	Length of Stay					
		Less Than 7 Days percent (n)	7 – 30 Days percent (n)	31 – 60 Days percent (n)	61 – 90 Days percent (n)	91 – 120 Days percent (n)	More than 120 Days percent (n)
Alcohol	506	6.1 (31)	20.0 (101)	21.3 (108)	17.2 (87)	14.6 (74)	20.8 (105)
Marijuana/Hashish*	419	7.4 (31)	15.3 (64)	19.8 (83)	19.3 (81)	12.9 (54)	25.3 (106)
Methamphetamine*	345	10.4 (36)	23.5 (81)	17.1 (59)	11.9 (41)	12.8 (44)	24.3 (84)

*Statistically significant (Jonckheere-Terpstra Test, $p < 0.05$).

CLIENTS' PERCEIVED BENEFITS OF TREATMENT

Table 29. Clients' Perceived Benefits

Table 29 presents client responses at the follow-up interview when asked their opinions of the various types of treatment received in the substance use disorder treatment programs. Results from follow-up interviews completed with clients at six months post discharge indicate that 354 of 419 clients (84.5%) feel the substance use treatment they received was either very beneficial or beneficial overall. "Beneficial" was the response indicated most often for the various types of counseling. Clients who responded "did not receive" for a certain type of counseling could have done so for various reasons including the type of counseling was not recommended, the type of counseling was not offered, or the type of counseling was offered but the client chose not to participate.

OMS Sample at Follow-Up n=419					
Perceived Benefit of Counseling	Individual Counseling percent (n=419)	Family Counseling percent (n=419)	Group Counseling percent (n=419)	Educational Counseling percent (n=417)	Overall Rating of Treatment Program percent (n=419)
Very Beneficial	38.9 (163)	6.7 (28)	26.0 (109)	18.7 (78)	42.2 (177)
Beneficial	39.4 (165)	3.6 (15)	35.1 (147)	35.7 (149)	42.2 (177)
Not Beneficial	12.2 (51)	1.2 (5)	16.7 (70)	10.8 (45)	15.5 (65)
Did Not Receive	9.5 (40)	88.5 (371)	22.2 (93)	34.8 (145)	Not Applicable

ADDITIONAL FOLLOW-UP DATA

Clients are asked additional questions during the follow-up interview to collect information regarding mental health assessments conducted by treatment agencies, referrals for mental health services while receiving substance use disorder treatment, and medications prescribed for psychological/emotional issues. Clients are also asked questions about their substance use causing stress and reduction in important activities, asked to rate both their physical health and emotional health six months following treatment discharge, and how they feel their substance use treatment at the treatment agency ended. Tables 30 through 37 and Figures 7 through 10 on the following pages present responses from the 419 clients in the 2015 OMS sample who completed follow-up interviews; data collected by Consortium staff are client self-reported.

Table 30. Mental Health Assessments and Referrals

At follow-up, clients are asked if they were offered a mental health assessment by treatment agency staff while receiving substance use treatment; if they were referred for any mental health services, and if they received any mental health services while in substance use treatment. As shown in Table 30, the majority of clients (67.8%) who completed a follow-up interview indicated they had been offered a mental health assessment by the treatment agency while receiving substance use services. Sixty-nine clients (16.5%) reported they were referred for mental health services by the substance use disorder treatment agency.

OMS Sample at Follow-Up n=419		
	Treatment Agency Offered Client Mental Health Assessment percent (n=419)	Treatment Agency Referred Client For Mental Health Services percent (n=419)
Yes	67.8 (284)	16.5 (69)
No	30.5 (128)	73.3 (307)
Already Receiving MH Services	Not a Response Option	9.8 (41)
Does Not Know or Remember	1.7 (7)	0.5 (2)

At treatment admission, treatment agency staff indicate if clients have a psychiatric problem in addition to an alcohol or drug problem. Table 31 on the following page utilizes this variable and provides additional information regarding clients offered mental health assessment and referrals for mental health services during substance use disorder treatment. Of the 419 clients who completed a follow-up interview, treatment agency staff indicated 183 clients (43.7%) had a psychiatric problem in addition to an alcohol or drug problem at admission.

Table 31. Psychiatric Problem Reported at Admission by Mental Health Assessments and Referrals During Substance Use Disorder Treatment

Nearly two-thirds of the clients (65.6%) who had a psychiatric problem identified by treatment agency staff at treatment admission were offered a mental health assessment during substance use disorder treatment.

OMS Sample at Follow-Up n=419				
Psychiatric Problem at Admission	Treatment Agency Offered Client Mental Health Assessment		Treatment Agency Referred Client for Mental Health Services	
percent (n=419)	percent (n=183)		percent (n=120)	
Yes 43.7 (183)	Yes	65.6 (120)	Yes	31.7 (38)
			No	55.8 (67)
			Already Receiving MH Services	11.7 (14)
			Does Not Know or Remember	0.8 (1)
	No	32.8 (60)	percent (n=60)	
			Yes	3.3 (2)
			No	78.3 (47)
			Already Receiving MH Services	18.3 (11)
	Does Not Know or Remember	1.6 (3)	percent (n=3)	
			Yes	0.0 (0)
			No	33.3 (1)
			Already Receiving MH Services	33.3 (1)
	No 56.3 (236)	percent (n=236)		percent (n=164)
Yes		69.5 (164)	Yes	17.1 (28)
			No	76.8 (126)
			Already Receiving MH Services	6.1 (10)
			Does Not Know or Remember	0.0 (0)
No		28.8 (68)	percent (n=68)	
			Yes	1.5 (1)
			No	92.6 (63)
			Already Receiving MH Services	5.9 (4)
Does Not Know or Remember		1.7 (4)	percent (n=4)	
			Yes	0.0 (0)
			No	75.0 (3)
			Already Receiving MH Services	25.0 (1)
			Does Not Know or Remember	0.0 (0)

Table 32. Clients Referred for Mental Health Services by Treatment Agency: Receiving Mental Health Services While in Substance Use Disorder Treatment

Table 32 is a subset of clients who completed the follow-up interview and includes 68 of the 69 clients who responded yes when asked if they received a referral for mental health services while in substance use disorder treatment. Of clients who reported they had been referred for mental health services, approximately two-thirds (46 clients, 67.6%) indicated they received mental health services.

Clients Referred for Mental Health Services by Treatment Agency	
Receiving Mental Health Services During Substance Use Disorder Treatment	
	percent (n=68)
Yes	67.6 (46)
No	32.4 (22)

Table 33. Location of Mental Health Services

Clients are asked if the mental health services they received were provided on-site at the treatment agency or by an agency or individual not affiliated with the treatment agency. Over half the clients (54.3%) indicated the received mental health services on-site at the treatment agency.

Received Mental Health Services at Treatment Agency or by Agency/Individual Not Affiliated with Treatment Agency	
	percent (n=46)
On-Site at Treatment Agency	54.3 (25)
Other Agency or Individual	45.7 (21)

Clients who indicate they received mental health services while receiving substance use treatment (either as a result of being referred during substance use treatment or already receiving mental health services) are asked two questions about their opinion of mental health services:

- How beneficial do you feel the mental health services were?
- Do you feel the mental health services helped you with your substance use treatment?

Table 34. Perceived Benefit of Mental Health Services Received During Substance Use Disorder Treatment

Of 46 clients who received mental health services while in substance use disorder treatment, 41 (89.1%) indicated the mental health services they received while in substance use treatment were either very beneficial or beneficial. All clients (100%) reported receiving mental health services while in substance use disorder treatment was either very beneficial or beneficial.

Clients Receiving Mental Health Services While in Substance Use Disorder Treatment		
	Perceived Benefit of Mental Health Services percent (n=46)	Perceived Benefit of Mental Health Services Helping with Substance Use Disorder Treatment percent (n=46)
Very Beneficial	54.3 (25)	80.4 (37)
Beneficial	34.8 (16)	19.6 (9)
Not Beneficial	10.9 (5)	0.0 (0)

Table 35. Medications for Psychological or Emotional Problems While in Treatment

At follow-up, clients are asked if they were prescribed any medications for psychological or emotional problems while in substance use treatment. Over one quarter (111 clients, 26.5%) reported taking medication for psychological or emotional problems while in treatment: 68 (16.2%) indicated they were prescribed the medication while in treatment and 43 clients (10.3%) reported they were already taking medication when they began substance use treatment.

Clients Prescribed Medications for Psychological or Emotional Problems While in Substance Use Disorder Treatment	
	percent (n=419)
Yes	16.2 (68)
No	73.5 (308)
Already Taking Medication	10.3 (43)

Table 36. Clients Still Taking Medications for Psychological or Emotional Problems Six Months Following Treatment Discharge

Clients who reported taking medications for psychological or emotional problems while in substance use treatment are asked if they are still taking the medications six months post treatment discharge. Of the 111 clients indicating they took medications for psychological or emotional problems while in substance use treatment, just under two-thirds (62.2%) reported they were still taking the medication at the follow-up interview.

Clients Still Taking Prescribed Medications for Psychological or Emotional Problems at Follow-Up	
	percent (n=111)
Yes	62.2 (69)
No	37.8 (42)

Figures 7 through 10 on the following pages present client responses at the follow-up interview when asked questions regarding stress and reduction of important activities as a result of previous or current use of alcohol or other drugs, as well as questions regarding the client's physical and emotional health.

Figure 7. Stress

Results from follow-up interviews completed with clients approximately six months post discharge indicate fewer than half the clients (45.3%) indicate feeling some amount of stress due to previous or current use of alcohol or other drugs.

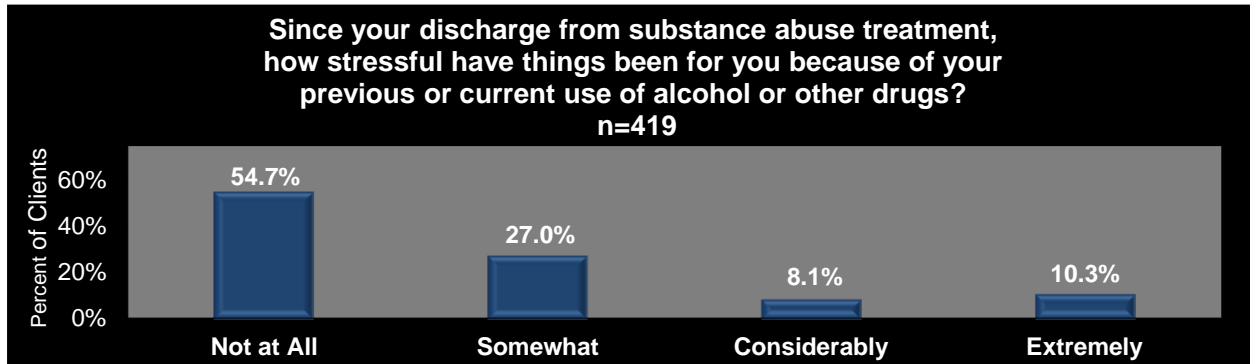


Figure 8. Reduction in Activities

Just under half of clients (46.8%) at follow-up reported previous or current use of alcohol or other drugs has caused them to give up activities that are important to them.

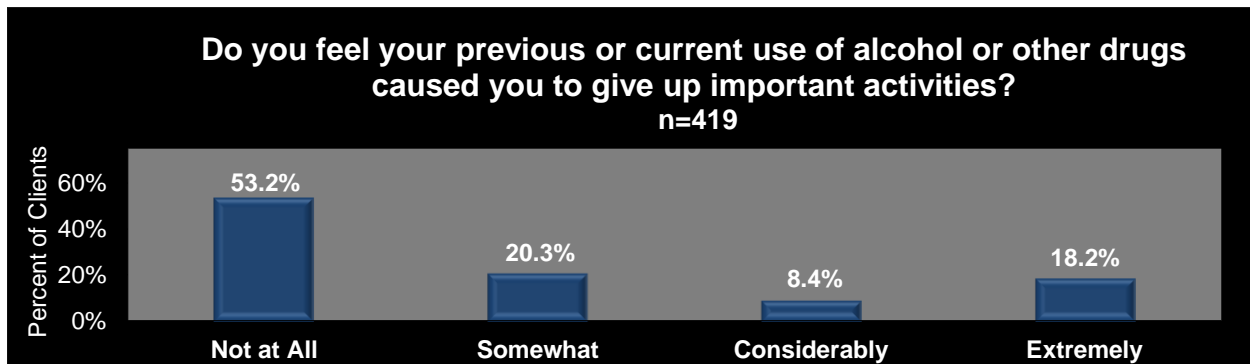


Figure 9. Physical Health

Clients most often reported “very good” physical health six months post substance use treatment discharge.

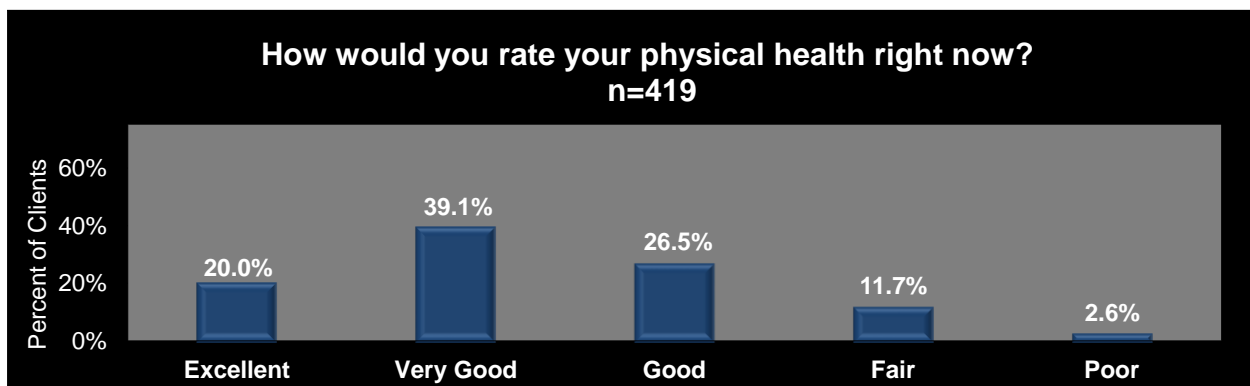
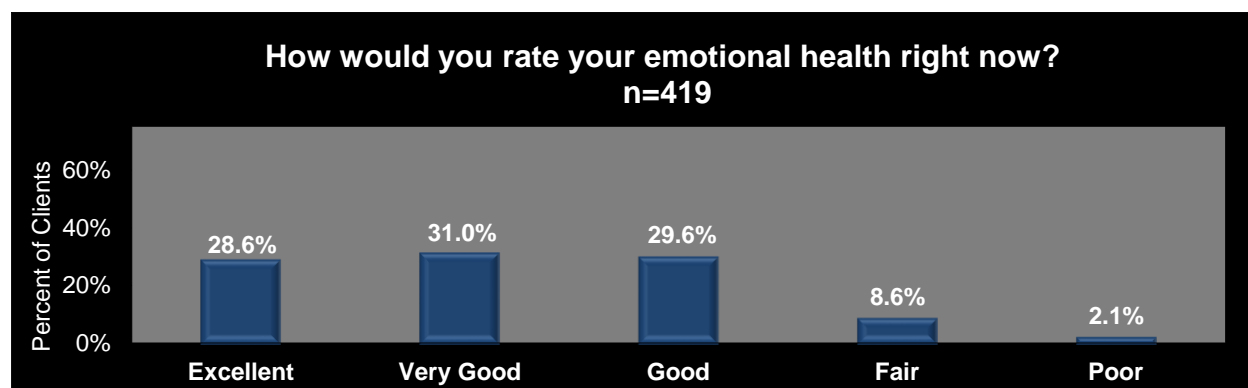


Figure 10. Emotional Health

At the follow-up interview, “very good” was the response clients most commonly indicated when asked about their emotional health.



Clients are asked how they feel their substance use treatment at the treatment agency ended. There are three discharge categories: successful completion; terminated (clients discharged from the program due to noncompliance, lack of treatment progress, or client leaving); and neutral (this category includes, but is not limited to, managed care decision, referral to another program, incarceration, or death).

Table 37. Discharge Status: Comparison of Recorded Discharge Status and Clients’ Perceptions of How Treatment Ended

In Table 37, each row presents the discharge status recorded by the treatment agency. Clients’ perception of their discharge status is provided in the columns. Thus, of the 255 clients successfully discharged by the treatment agency, 237 clients (92.9%) felt their treatment ended successfully. Of the 129 clients who were terminated by the agency, over half (75 clients, 58.1%) felt their treatment ended successfully. Only 40.3% of those terminated by agency staff, indicated their treatment ended unsuccessfully (52 of 129 clients). Overall, there was little agreement (except for those successfully discharged) between treatment agencies and client perceptions of discharge status (Cohen’s kappa = 0.32).

Comparison of Recorded Discharge Status and Clients’ Perceptions of How Treatment Ended N=418						
		Clients’ Perception of How Treatment Ended				
		n	Successful Completion percent (n)	Terminated percent (n)	Neutral Discharge percent (n)	Client Unsure/ No Opinion percent (N)
Discharge Reason Reported by Treatment Agency Staff	Successful Completion	255	92.9 (237)	5.9 (15)	1.2 (3)	0.0 (0)
	Terminated	129	58.1 (75)	40.3 (52)	0.8 (1)	0.8 (1)
	Neutral Discharge	34	52.9 (18)	47.1 (16)	0.0 (0)	0.0 (0)

APPENDIX: PRESENTATION OF TRACKING DATA

Table A1. Client Classifications.....	37
Figure A1. Classification of 2015 OMS Sample.....	40
Tracking Report: 2015 OMS Sample	41
Table A2. Case Status – All Clients	41
Table A3. Closed Clients by Category.....	41
Table A4. Recruitment and Follow-Up Rates	41
Client Contacts: 2015 OMS Sample	42
Table A5. Type and Number of Client Contacts through September 12, 2016	42
Table A6. Contacts for Clients with Closed Cases	43

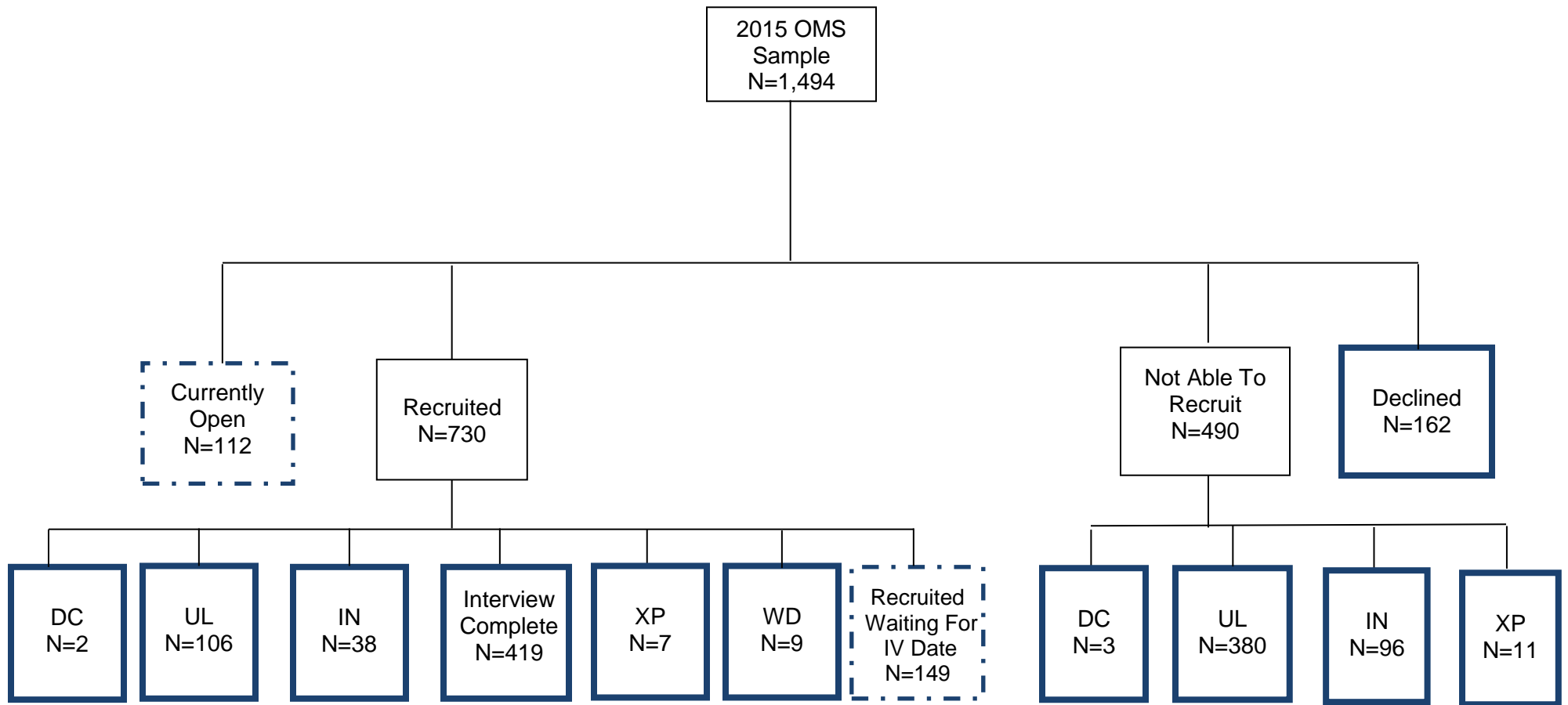


Table A1. Client Classifications

Sample Size	The total number of clients who have been randomly selected for inclusion in the OMS project.
Currently Open	Clients who staff are actively trying to locate and recruit, however have not made contact with. Included are clients who have been left messages and/or sent letters, and have not yet responded to repeated contact attempts.
Recruited	Clients who at some point agreed to participate in the follow-up interview.
Not Able to Recruit	Clients that staff have never been able to successfully contact.
Interview Completed	Interview has been successfully completed. Case is closed.
Declined	Client declined participation in the follow-up interview. Case is closed.
Deceased	Client was deceased. Case is closed.
Withdrew	Client initially agreed to participate in the study but then decided not to participate in the project. Case is closed.
Expired	When Consortium received discharge date, the subsequent interview date had already past (expired). Client may or may not have been successfully recruited. Case is closed.
Unable to Locate	Staff were not able to make contact with the client either via the telephone or mail at time interview was due to take place. The client may or may not have been successfully recruited. Case is closed.
Incarcerated	Client incarcerated at the time interview was due to take place. The client may or may not have been successfully recruited. Case is closed.
Recruited Waiting for IV Date	Client agreed to take part in the follow-up interview. Client is receiving update calls and/or letters until the interview date nears.



Figure A1. Classification of 2015 OMS Sample



Key: DC= Deceased, UL=Unable to Locate, IN=Incarcerated, XP=Expired, WD= Withdrew

Note: Bolded boxes represent clients with a closed status. Dashed boxes represent clients with an open status (staff are attempting to locate, recruit, and/or interview the client.)



Tracking Report: 2015 OMS Sample

Table A2. Case Status – All Clients

Status	Number of Clients
Open Cases	261
Closed Cases	1,233
Total	1,494

Table A3. Closed Clients by Category

Category	Number of Clients	Percentage of Clients
Follow-Up Interview Complete	419	34.0
Unable to Locate	486	39.4
Declined or Withdrew Participation	171	13.9
Incarcerated	134	10.9
Expired*	18	1.5
Deceased	5	0.4
Total	1,233	100.1

*When Consortium received discharge date, interview date had already past.

Table A4. Recruitment and Follow-Up Rates*

Category	Percentage
Recruitment	57.4 (730/1,272)
Follow-Up	78.5 (419/534)

*Refer to page 5 for additional information on rate calculations.



Client Contacts: 2015 OMS Sample

Table A5. Type and Number of Client Contacts through September 12, 2016.

Type of Contact	Adolescents N=28	Adults N=1,466	Total N=1,494
An outgoing phone call attempting to recruit client.	223	13,064	13,287
An outgoing phone call in which recruitment has actually taken place and the client has agreed to participate.	12	588	600
An incoming phone call in which recruitment has actually taken place and the client agreed to participate.	0	130	130
An outgoing phone call attempting to update/check-in with client.	59	5,170	5,229
An incoming or outgoing phone call in which a successful update occurs with client.	19	1,182	1,201
An incoming phone call from client or collateral contact.	10	358	368
An outgoing phone call attempting to reach client for the six month follow-up interview.	81	3,722	3,803
An outgoing phone call completing the six month follow-up interview.	5	359	364
An incoming phone call in which the six month follow-up interview is completed.	2	53	55
An outgoing phone call attempting to track client through collateral contacts.	6	232	238
Any incoming and outgoing attempts (phone call/letter/fax/email) to track client through their substance use disorder treatment agency.	2	54	56
Other - usually an internet search, but includes any call/contact that doesn't fall under any other category.	132	7,927	8,059
A letter sent to contact client; includes letters that have been returned and notification of address changes from post office; outgoing or incoming.	87	7,118	7,205
All Client Contacts	638	39,957	40,595

Table A6. Contacts for Clients with Closed Cases*

Status	Clients	All Contacts	Contacts (Mean)	Number of Letters Mailed
Interviews Completed	419	10,892	26.0	1,865
Unable to Locate	486	16,696	34.4	3,100
Declined	162	1,454	9.0	231
Incarcerated	134	3,238	24.2	616
Expired	18	574	31.9	107
Withdrew	9	204	22.7	30
Deceased	5	172	34.4	23
Grand Total	1,233	33,230	27.0	5,972

*Information in Table A6 represents only closed cases. Cases are closed for 1,233 of the 1,494 clients (82.5%) in the 2015 OMS sample.