



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

**STATE OF IOWA
OUTCOMES MONITORING SYSTEM
YEAR 13
ANNUAL OUTCOME EVALUATION REPORT**

SEPTEMBER 2011

**IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION
UNIVERSITY OF IOWA, IOWA CITY, IOWA 52242-5000**

**WITH FUNDS PROVIDED BY:
IOWA DEPARTMENT OF PUBLIC HEALTH, DIVISION OF BEHAVIORAL HEALTH**

CITATION OF REFERENCES RELATED TO THIS REPORT IS APPRECIATED. SUGGESTED CITATION:

HEDDEN, S., GUARD, M., & ARNDT, S. (2011). STATE OF IOWA OUTCOMES MONITORING SYSTEM: YEAR 13 ANNUAL OUTCOME EVALUATION REPORT. (IOWA DEPARTMENT OF PUBLIC HEALTH CONTRACT #5881NA01). IOWA CITY, IA: IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION.
[HTTP://ICONSORTIUM.SUBST-ABUSE.UIOWA.EDU/](http://iconsortium.subst-abuse.uiowa.edu/)



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

STATE OF IOWA OUTCOMES MONITORING SYSTEM

**SUZY HEDDEN, BS
EVALUATION COORDINATOR**

**MOLLY GUARD, MA
ASSOCIATE DIRECTOR**

**STEPHAN ARNDT, PHD
DIRECTOR**

EXECUTIVE SUMMARY

The Outcomes Monitoring System (OMS) was established to systematically gather data on substance abuse treatment outcomes in Iowa. Randomly selected clients from 23 Iowa Department of Public Health-funded treatment agencies were contacted for follow-up interviews that occurred approximately six months after discharge from treatment. Eight hundred ninety-six clients admitted in calendar year 2010 were selected to participate in the OMS project. This report presents outcomes for 381 of these clients who completed the follow-up interview.

Client Characteristics of 2010 OMS Sample

Age and Sex: Clients ranged from 14 to 66 years of age with a median age of 30 years. Six hundred thirty-seven clients (71.7%) were male and 259 (28.9%) were female.

Race and Ethnicity: Eight hundred four clients (89.7%) reported Caucasian/White as their primary race at admission; 69 clients (7.7%) reported African American/Black, ten clients (1.1%) reported “other race”, and eight clients (0.9%) reported American Indian. There were five clients (0.6%) who responded “unknown” or for whom data was missing. Forty-eight individuals (5.4%) reported Hispanic or Latino ethnicity at admission.

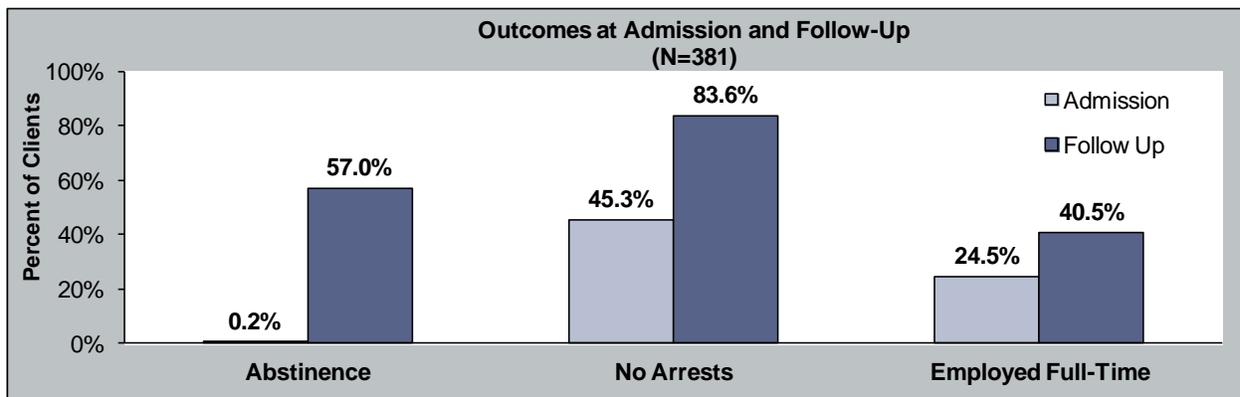
Substance Use at Admission: At admission, 99.9% of the clients indicated a primary substance of use. Alcohol was the most common primary substance reported by 47.7% of the clients, followed by marijuana (27.2%) and methamphetamine (17.5%).

Outcomes for 381 Clients with Completed Follow-Up Interviews

The following data describe outcomes at admission and follow-up for 381 clients who have completed the follow-up interview.

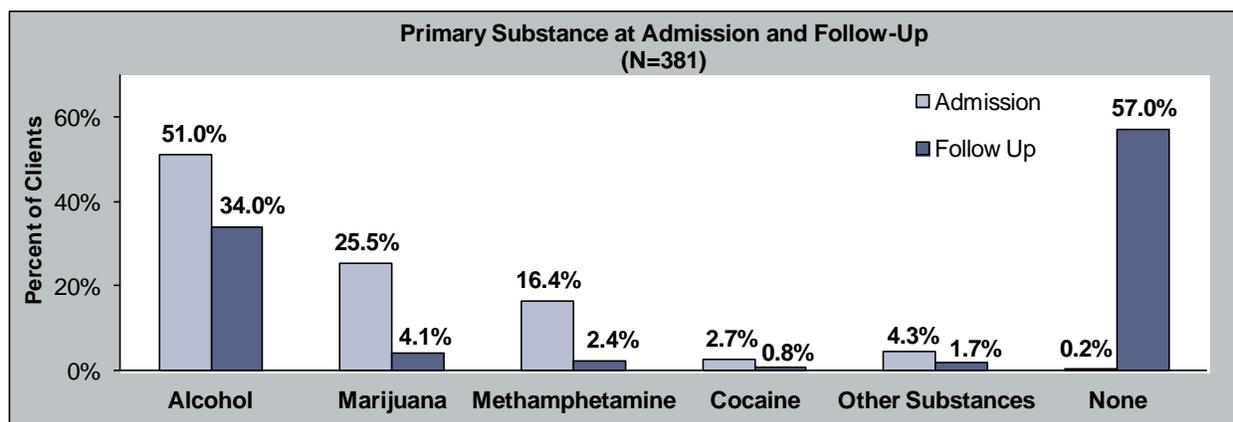
Abstinence, Arrests, and Full-Time Employment at Admission and Follow-Up

Abstinence (based on the primary substance reported) increased by 56.8 percentage points from admission to follow-up. Over 50% of clients reported arrests at admission, whereas less than 20% reported arrests at follow-up. Full-time employment increased by 16 percentage points; in addition to the 40.5% of clients working full-time, 19.7% of the clients reported part-time employment at follow-up.



Primary Substance at Admission and Follow-Up

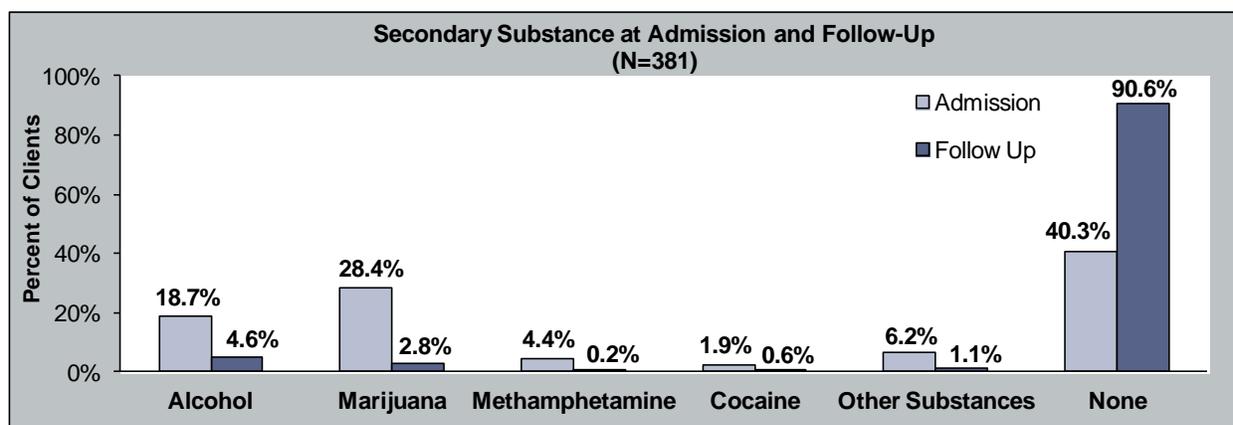
At both admission and follow-up, alcohol was the most commonly reported primary substance. Marijuana was the second most commonly reported primary substance at admission and follow-up, followed by methamphetamine. At follow-up, over half of the clients (57%) reported abstinence during the six months following treatment discharge, thus no primary substance was indicated.



Note: Due to rounding, percentages may not add up to exactly 100%.
A client's primary substance may change from admission to follow-up.

Secondary Substance at Admission and Follow-Up

At admission, a secondary substance was reported by 59.7% of the clients who completed a follow-up interview; marijuana was the most commonly used secondary substance at admission. Of clients who reported a secondary substance at follow-up, alcohol was the most common, followed by marijuana. Among the 381 clients who completed a follow-up interview, clients reporting "no secondary substance" increased from 40.3% at admission to 90.6% at follow-up, therefore, less than 10% of clients reported using more than one substance at follow-up.



Note: Due to rounding, percentages may not add up to exactly 100%.
A client's secondary substance may change from admission to follow-up.

Primary Substance at Admission by Outcome Variables at Follow-Up

Of the 381 clients interviewed: 57% reported abstinence at follow-up, 83.6% had not been arrested since discharge from treatment, and 40.5% were employed full-time at follow-up. The following table shows the three most often reported primary substances at admission by the three outcome variables of abstinence, no arrests, and employment at follow-up. There are significant associations between the primary substance reported at admission and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$) and the primary substance reported at admission and no arrests at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$).

Primary Substance at Admission by Outcome Variables at Follow-Up				
Primary Substance at Admission	N	Abstinence at Follow-Up* weighted percent	No Arrests at Follow-Up* weighted percent	Employed Full-Time at Follow-Up weighted percent
Alcohol	194	48.8	84.6	41.0
Marijuana/Hashish	97	60.7	82.3	40.9
Methamphetamine	62	77.9	88.6	46.3

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

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

Length of Stay

Of the 896 clients in the OMS sample, discharge information was received for 811 clients and 85 were still receiving treatment services. The figure presents the percentage of clients in six length of stay categories. The highest percentage of clients had a length of stay of 31 to 60 days; the lowest percentage of clients had a length of stay less than seven days.



The highest percentage of clients had a length of stay of 31 to 60 days; the lowest percentage of clients had a length of stay less than seven days. The median length of stay was 60 days, with a range of zero to 450 days. Clients whose primary substances at admission were marijuana and methamphetamine had the longest median length of stays of 63 days. Clients indicating alcohol as the primary substance at admission had a median length of stay of 54 days and clients whose primary substance at admission was cocaine had the shortest median length of stay of 47 days.



TABLE OF CONTENTS

Background.....	1
Evaluation Process and Methods.....	1
Data Collection.....	1
Sampling Procedures and Data Weighting.....	1
Recruitment.....	2
Tracking.....	2
Follow-Up Interview.....	2
Clients.....	3
Description of Client at Admission.....	3
Figure 1. Age and Sex at Admission.....	3
Figure 2. Race.....	4
Figure 3. Ethnicity.....	4
Recruitment, Tracking, and Follow-Up Efforts.....	4
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. AA, NA, or Similar Meetings Attended.....	10
Table 5. Arrests.....	10
Table 6. Hospitalizations Due to a Substance Abuse Related Problem.....	10
Table 7. Employment Status.....	11
Table 8. Months Employed.....	11
Table 9. Monthly Income.....	12
Table 10. Primary Source of Support.....	12
Table 11. Days Missed of Work or School Due to Substance Use.....	13
Table 12. Relationship Status.....	13
Table 13. Living Arrangements.....	14
Table 14. Education at Follow-Up.....	15
Outcomes: Abstinence.....	15
Table 15. Primary Substance at Admission by Abstinence at Follow-Up.....	16
Table 16. Employment at Follow-Up by Abstinence at Follow-Up.....	17
Table 17. Change in Employment Status from Admission to Follow-Up by Abstinence at Follow-Up.....	17
Table 18. Living Arrangements at Follow-Up by Abstinence at Follow-Up.....	18
Table 19. Monthly Income at Follow-Up by Abstinence at Follow-Up.....	19
Table 20. Change in Income from Admission to Follow-Up by Abstinence at Follow-Up.....	19
Table 21. Primary Income Source at Admission and Follow-Up by Abstinence at Follow-Up.....	20
Table 22. Arrests at Follow-Up by Abstinence at Follow-Up.....	21
Table 23. AA, NA, or Similar Meetings Attended at Follow-Up by Abstinence at Follow-Up.....	21



Outcomes: Arrests and Employment.....	21
Table 24. No Arrests at Follow-Up by Primary Substance at Admission	22
Table 25. Full-Time Employment at Follow-Up by Primary Substance at Admission.....	23
Outcomes: Age and Sex	24
Figure 4. Primary Substance at Admission and Follow-Up by Age	24
Figure 5. Primary Substance at Admission and Follow-up by Sex	25
Figure 6. 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 7. Median Length of Stay by Primary Substance at Admission	29
Table 28. Length of Stay by Primary Substance at Admission.....	29
Clients' Perceived Benefits.....	30
Table 29. Clients' Perceived Benefits	30
Appendix: Presentation of Tracking Data	31
Table A1. Client Classifications	32
Figure A1. Classification of 2010 OMS Sample	33
Tracking Report: 2010 OMS Sample.....	34
Table A2. Case Status – All Clients	34
Table A3. Closed Clients by Category	34
Table A4. Recruitment and Follow-Up Rates	34
Client Contacts: 2010 OMS Sample.....	35
Table A5. Type and Number of Client Contacts through September 7, 2011	35
Table A6. Contacts for Clients with Closed Cases	36



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 abuse 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 analysis, and reporting since January 1999.

The Consortium conducts follow-up interviews with randomly selected clients from 23 IDPH-funded substance abuse treatment agencies. The interviews occur approximately six months after discharge from the substance abuse 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 abuse treatment in 2010. Eight hundred ninety-six clients were selected to participate in the OMS project. This report presents outcomes for 381 of these clients who completed the follow-up interview.

EVALUATION PROCESS AND METHODS

Data Collection

IDPH-funded substance abuse treatment agencies in Iowa use several standardized client data collection systems. Data are collected by treatment agency staff on each client at admission and at discharge. The Consortium's follow-up data collection instrument integrates with client data recorded at admission. Admission data, as well as follow-up data collected by Consortium staff, are client self-reported data.

Sampling Procedures and Data Weighting

OMS data are obtained through stratified random sampling procedures from the population of publicly funded clients participating in substance abuse treatment. This population includes clients who receive IDPH-funded drug or alcohol treatment in one of the following environments: medically managed inpatient, medically monitored residential, clinically managed residential, intensive outpatient, extended outpatient, or continuing care. The monthly data set from which the sample is drawn is composed of the previous month's admission dataset transmitted to the Consortium from IDPH. Given that the number of admissions varies from month to month, the sample size also varies. Monthly samples which contained 2010 admissions had an average size of 78 clients with a range of 51 to 114 clients. The monthly random sample size was approximately 8% of the available admission records for the adult and adolescent client population admitted to treatment in that month. It is important to note that there was a brief hiatus in 2010 due to a change in the database structure at IDPH.

A statistical weighting procedure allows more accurate representation of the State of Iowa's admissions as a whole; data in this report are weighted. Unless noted, throughout this report, the (weighted) number of clients is rounded to the nearest integer; therefore, the numbers of clients are approximate, but the percentages are accurate.



Recruitment

When clients are admitted to substance abuse treatment, the agency provides materials that include a letter from IDPH describing in detail the follow-up project and the possibility of being selected for a follow-up interview. Immediately after the monthly OMS sample is selected, Consortium staff members 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 that they are calling on behalf of the Health Research Network (HRN) to talk about participation in a public health study. HRN is a pseudonym the Consortium utilizes to assist in protecting client confidentiality. Procedures are established so that 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 an oral agreement to participate in the follow-up interview. Participants are informed that they will receive periodic update calls or letters, approximately every six to eight 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 agency staff are contacted for assistance in updating contact information.

Clients may decline or withdraw participation in OMS 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 web-based password-protected tracking system was developed by the Consortium to assist research assistants in managing individual client data. Client tracking information provides a database that contains 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 31 through 36.

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

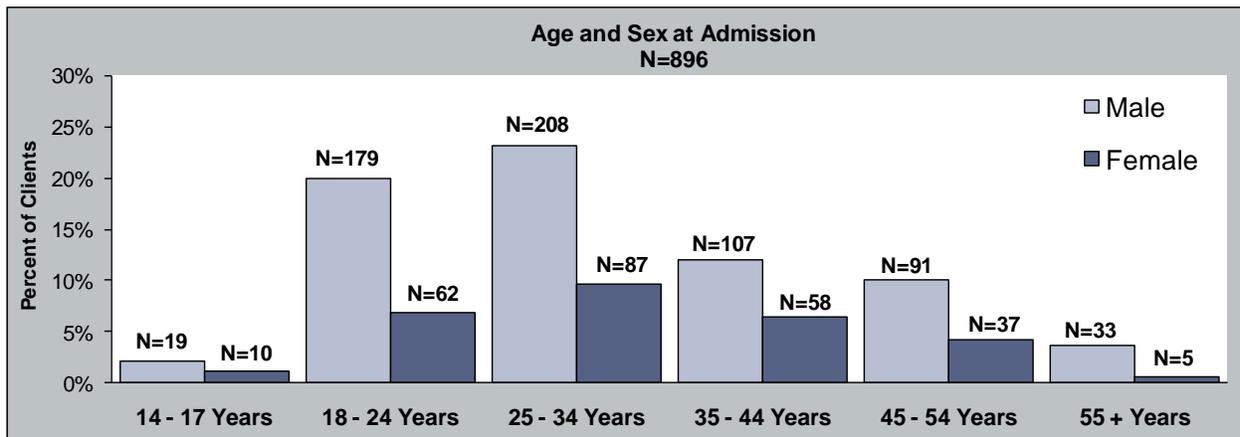
Description of Client at Admission

During the twelve-month sampling period, 896 clients were selected to participate in the OMS project. This group of randomly selected clients had substance abuse treatment admission dates from January 4, 2010 through December 30, 2010.

Clients ranged from 14 to 66 years of age with a median age of 30 years. Of the 896 clients, 29 (3.2%) were adolescents (age 17 and younger) and 867 (96.8%) were adults. Six hundred thirty-seven clients (71.1%) were male and 259 (28.9%) were female.

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



Note: The number of clients is rounded to the nearest integer due to the weighting of the data.

Figure 2. Race

Figure 2 presents race reported at admission for clients in the OMS sample. Eight hundred four clients reported Caucasian/White as their primary race at admission; 69 clients reported African American/Black, eight clients reported American Indian, and ten clients reported “other race”.

The “other race” category includes clients who reported Alaskan Native, Alaskan Native/American Indian, African American/White, Asian, or Hawaiian or Pacific Islander as their primary race. Additionally, there were five clients who responded “unknown” when asked about their race or for whom data were missing.

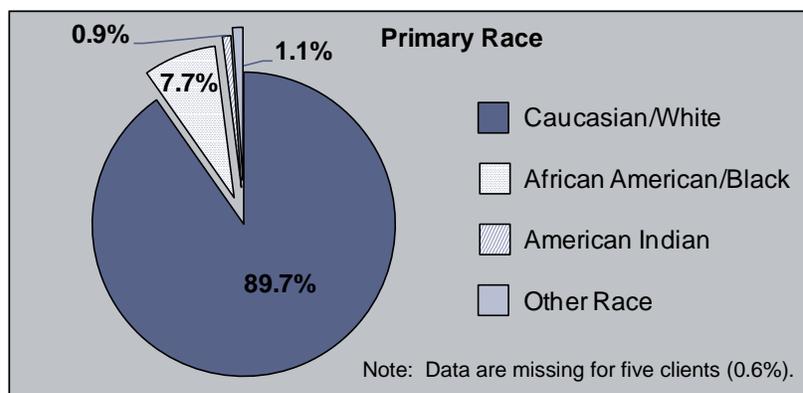
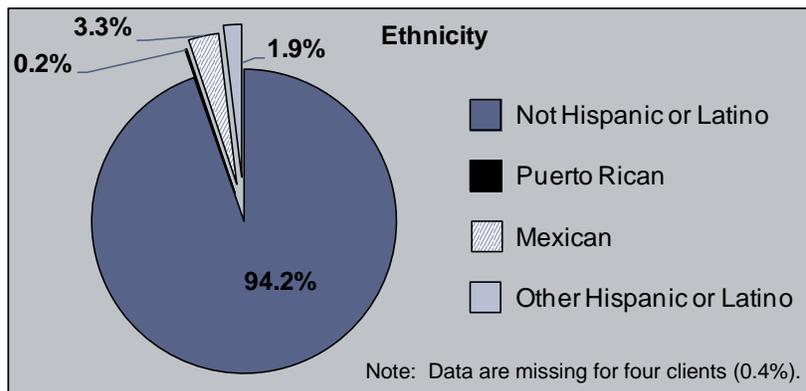


Figure 3. Ethnicity

Figure 3 shows ethnicity reported at admission for the 896 clients in the OMS sample. Forty-eight individuals (5.4%) reported Hispanic or Latino ethnicity at admission.



Recruitment, Tracking, and Follow-Up Efforts

As of September 7, 2011, of the 896 clients who were selected to participate in the OMS project, 564 individuals had been contacted by Consortium staff and consented to participate in the follow-up interview; 48 clients declined to participate in the project.

Six hundred eighty-six of the clients had reached six months post discharge and were eligible to complete the follow-up interview. Of these, 381 clients completed a follow-up interview. There were 50 recruited individuals who could not be located for the interview after numerous phone calls, letters, and internet searches. Twelve clients were incarcerated at the time of their interview; Consortium staff does not interview incarcerated individuals. Interview due dates had already passed for 17 recruited clients when the Consortium received notification of their discharge dates, four clients chose to withdraw from the project after previously agreeing to participate, and one recruited client was deceased when the interview was due. An additional 221 clients were not able to be recruited for various reasons including: 158 clients could not be located; 51 clients were incarcerated (Consortium staff does not recruit incarcerated individuals); treatment agency staff submitted discharge dates late for eight nonrecruited clients,



resulting in the follow-up interview date having already passed when the Consortium received notification; and four clients were deceased.

Efforts are underway to locate and attempt to recruit the remaining 63 clients who are still not eligible for an interview. The remaining 99 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 (564), those who declined to participate (48), and non-recruited clients whom staff were not able to locate (158). This calculation results in a recruitment rate of 73.2%. Of the recruited clients due for a follow-up interview who were not incarcerated or deceased (435 clients), 87.6% received an interview. This calculation includes all clients who completed the follow-up interview (381), recruited clients who could not be located when their interview was due (50), and those who decided not to take part in the interview after initially agreeing to do so (4). Detailed tracking information regarding the OMS sample is provided in the Appendix on pages 31 through 36.

CHANGES FROM ADMISSION TO FOLLOW-UP

Tables 1, 2, and 4 through 13 present admission responses from the 896 clients admitted in 2010 in the OMS sample and admission and follow-up responses from clients who have completed follow-up interviews (381 clients). The first column presents all possible responses for the question. The second column presents the admission responses for the 896 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 (381 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, 99.9% of the clients indicated a primary substance of use. Alcohol was the most common primary substance reported by 47.7% of the 896 clients in the OMS sample. At follow-up, alcohol was also the most often indicated primary substance with 34% of clients reporting use 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 58.8% of clients in the OMS sample at admission; marijuana was the most commonly used secondary substance indicated by 26.3% of the clients. For clients who reported a secondary substance at follow-up, alcohol was the most common, followed by marijuana. Among the 381 clients who completed a follow-up interview, clients reporting “no secondary substance” increased from 40.3% at admission to 90.6% at follow-up, therefore, less than 10% of clients reported using more than one substance at follow-up.
- **Arrests:** At admission, 56.6% of the clients in the OMS sample reported one or more arrests in the previous twelve months. Just over 16% of the clients reported arrests in the six months following treatment discharge.
- **Employment:** At admission, 37% of clients in the OMS sample indicated full- or part-time employment. At follow-up, over 60% reported they were employed full- or part-time. Among



the 381 clients completing the follow-up interview, clients indicating full-time employment increased by 16 percentage points from admission to follow-up.

- **Income:** Of 357 clients who completed follow-up interviews, there was a large decrease (23.7% percentage points) in clients who indicated they had no monthly income: 53.6% reported this at admission and 29.9% reported this at follow-up. There were increases in the two highest income categories (\$1001 to \$2000, and over \$2000) at follow-up.



Table 1. Primary Substance

At admission, all but one client indicated a primary substance. At follow-up, over half of the clients (57%) reported abstinence during the six months following treatment discharge, thus no primary substance was indicated. The most commonly indicated primary substance at admission and follow-up was alcohol. Among clients who completed the follow-up interview, there was a decrease of 17 percentage points between admission (51%) and follow-up (34%) for clients reporting alcohol as the primary substance. Marijuana was the second most commonly reported primary substance at admission and follow-up, followed by methamphetamine. The percentage of clients reporting marijuana as their primary substance decreased from 25.5% at admission to 4.1% at follow-up.

Primary Substance	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)	
		Admission	Follow-Up
None	0.1	0.2	57.0
Alcohol	47.7	51.0	34.0
Cocaine/Crack	2.9	2.7	0.8
Marijuana/Hashish	27.2	25.5	4.1
Methamphetamine	17.5	16.4	2.4
Heroin	1.1	0.7	0.0
Non-Prescription Methadone	0.0	0.0	0.0
Other Opiates and Synthetics	3.7	2.2	0.1
PCP	0.0	0.0	0.0
Other Hallucinogens	0.0	0.0	0.0
Other Amphetamine	0.2	0.2	0.0
Other Stimulants	0.0	0.0	0.1
Benzodiazepines	0.4	1.0	0.0
Other Tranquilizers	0.0	0.0	0.0
Barbiturates	0.0	0.0	0.0
Other Sedatives and Hypnotics	0.0	0.0	0.0
Inhalants	0.1	0.1	0.0
Over the Counter	0.0	0.0	0.2
Steroids	0.0	0.0	0.0
Ecstasy	0.0	0.0	0.0
Oxycontin	0.2	0.2	0.0
Other Prescribed Analgesics	0.0	0.0	1.3
Other	0.0	0.0	0.0

Note: Due to rounding, percentages may not add up to exactly 100%.
A client's primary substance may change from admission to follow-up.



Table 2. Secondary Substance

Clients reporting no secondary substance increased by 50.3 percentage points from 40.3% at admission to 90.6% at follow-up; 9.4% of the clients reported using more than one substance six months post discharge. Among clients who completed a follow-up interview, the most common secondary substance reported at admission was marijuana, indicated by 28.4% of the clients. The most common secondary substance reported at follow-up was alcohol (4.6%), followed by marijuana (2.8%). There were large decreases between admission and follow-up for clients reporting alcohol or marijuana as their secondary substance, 14.1 and 25.6 percentage points respectively. Additionally, there was a 4.2 percentage point decrease between admission and follow-up for clients reporting methamphetamine as their secondary substance.

Secondary Substance	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)	
		Admission	Follow-Up
None	41.2	40.3	90.6
Alcohol	18.3	18.7	4.6
Cocaine/Crack	3.1	1.9	0.6
Marijuana/Hashish	26.3	28.4	2.8
Methamphetamine	6.0	4.4	0.2
Heroin	0.3	0.4	0.0
Non-Prescription Methadone	0.0	0.0	0.0
Other Opiates and Synthetics	2.8	3.3	0.0
PCP	0.0	0.0	0.0
Other Hallucinogens	0.1	0.0	0.0
Other Amphetamine	0.0	0.0	0.0
Other Stimulants	0.0	0.0	0.0
Benzodiazepines	0.8	0.8	0.3
Other Tranquilizers	0.0	0.0	0.0
Barbiturates	0.0	0.0	0.0
Other Sedatives and Hypnotics	0.3	0.6	0.0
Inhalants	0.2	0.1	0.0
Over the Counter	0.0	0.0	0.0
Steroids	0.0	0.0	0.0
Ecstasy	0.4	0.5	0.0
Oxycontin	0.1	0.2	0.0
Other Prescribed Analgesics	0.2	0.4	0.8
Other	0.0	0.0	0.0

Note: Due to rounding, percentages may not add up to exactly 100%.
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 be comparable (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 that they have used alcohol one to three times in the past month, representing a decrease in their frequency of use.

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 report the same primary substance at both admission and follow-up, and includes *only* clients who reported at follow-up (therefore excludes clients who report abstinence at follow-up). The “Increased Use” category indicates 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.

For this group of 111 clients, “1 to 3 times in past month” was the most common frequency of use at admission (30.2%) and “no past month use” was the most common frequency at follow-up (29%). This subgroup of clients most commonly reported the same use pattern of their primary substance at both admission and follow-up (37.5%); 35.5% of clients in this group indicated using their primary substance less frequently at follow-up compared to admission; and 27.1% reported an increase in use of their primary substance at follow-up.

Change in Frequency of Use	OMS Sample with Completed Follow-up Interviews Clients Reporting Same Primary Substance at Admission and Follow-Up N=111
Increased Use	27.1
Maintained Same Use	37.5
Decreased Use	35.5

Note: Due to rounding, percentages may not add up to exactly 100%.

In addition to the 111 clients represented in Table 3 above, 53 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). Twenty-one of the 53 clients (39.6%) identified that their primary substance at follow-up was the substance they originally reported as their secondary substance at admission. Nearly 45% of this group of clients switched from marijuana to alcohol and 7% changed from methamphetamine to alcohol.



Table 4. AA, NA, or Similar Meetings Attended

At follow-up, more clients reported attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar meetings than at admission. Over 45% of clients reported attending meetings during the six months following discharge from treatment.

Average Number of Meetings Attended Per Month	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=380* (weighted percent)		
		Admission	Follow-Up	Change
None	77.6	73.9	53.5	-20.4
1 to 10 Meetings	17.7	21.0	38.6	+17.6
11 or More Meetings	4.7	5.1	8.0	+2.9

Note: Due to rounding, percentages may not add up to exactly 100%.

*Follow-up data is missing for one client.

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, 54.7% of clients reported arrests at admission, whereas just over 16% reported arrests at follow-up.

Number of Arrests	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
None	43.5	45.3	83.6	+38.3
1 to 3 Times	52.9	51.1	16.4	-34.7
4 or More Times	3.7	3.6	0.0	-3.6

Note: Due to rounding, percentages may not add up to exactly 100%.

Table 6. Hospitalizations Due to a Substance Abuse Related Problem

Fewer clients reported substance abuse related hospitalizations at follow-up compared to admission. Just over 9% of clients reported hospitalizations for substance abuse related problems at follow-up, whereas over 14% of interviewed clients indicated substance abuse related hospitalizations at admission.

Number of Hospitalizations	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
None	85.7	85.5	90.9	+5.4
1 to 3 Times	13.9	13.8	8.8	-5.0
4 or More Times	0.4	0.6	0.3	-0.3

Note: Due to rounding, percentages may not add up to exactly 100%.



Table 7. Employment Status

At follow-up, 60.2% of clients reported that they were employed full or part-time. Among clients with completed follow-up interviews, full-time employment increased by 16 percentage points from admission to follow-up. Clients reporting they were unemployed (looking for work in the past 30 days) decreased by 13.1 percentage points from admission to follow-up. Clients 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. At follow-up, 11.1% of clients reported not being in the labor force; a 10.2 percentage point decrease from admission.

Employment Status	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
Employed Full-Time (≥35 hrs/wk)	24.3	24.5	40.5	+16.0
Employed Part-Time (<35 hrs/wk)	12.7	12.5	19.7	+7.2
Unemployed (Looking For Work in the Past 30 Days)	44.6	41.8	28.7	-13.1
Not in Labor Force	18.5	21.3	11.1	-10.2

Note: Due to rounding, percentages may not add up to exactly 100%.

Table 8. Months Employed

At follow-up, over 50% 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 12.4 percentage points from admission to follow-up.

Months Employed	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
None	45.4	47.5	35.1	-12.4
Three Months or Less	19.8	15.8	13.2	-2.6
Four or More Months	34.9	36.6	51.7	+15.1

Note: Due to rounding, percentages may not add up to exactly 100%.



Table 9. Monthly Income

There was a large decrease (23.7 percentage points) in clients who indicated they had no monthly income from admission to follow-up. Nearly 45% of clients indicated their taxable monthly income at follow-up was over \$1000. There were increases in the two highest income categories (\$1001 to \$2000 and over \$2000) at follow-up, perhaps corresponding to the previous findings (Table 7 on previous page) that more clients were employed at follow-up.

Monthly Income	OMS Sample at Admission N=882* (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=357* (weighted percent)		
		Admission	Follow-Up	Change
None	55.4	53.6	29.9	-23.7
\$500 or Less	8.8	6.5	7.6	+1.1
\$501 to \$1000	16.1	20.8	17.7	-3.1
\$1001 to \$2000	15.5	15.6	31.8	+16.2
Over \$2000	4.1	3.6	13.1	+9.5

Note: Due to rounding, percentages may not add up to exactly 100%.

*Data for 14 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 24 clients in the 'OMS Sample with Completed Follow-Up Interviews' column are excluded due to admission records 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 13.9 percentage points and clients indicating “family/friends” as their primary source of support increased by 7.2 percentage points. Clients responding to the “none” category decreased by 27.6 percentage points from admission to follow-up.

Primary Source of Support	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
None	29.9	27.6	0.0	-27.6
Wages/Salary	37.1	40.0	53.9	+13.9
Family/ Friends	22.4	23.0	30.2	+7.2
Public Assistance	2.2	2.3	1.8	-0.5
Retirement/ Pension	0.4	0.4	0.7	+0.3
Disability	1.3	2.6	3.4	+0.8
SSI and SSDI	1.1	1.7	1.9	+0.2
Other	5.5	2.5	8.1	+5.6

Note: Due to rounding, percentages may not add up to exactly 100%.



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

Very few clients (0.6%) reported missing any days of work or school due to a substance abuse issue in the six month post-discharge period.

Days Missed	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
Zero Days	87.8	91.0	89.3	-1.7
1 to 5 Days	5.3	5.0	0.6	-4.4
6 or More Days	4.6	2.5	0.0	-2.5
Not Applicable*	2.4	1.5	10.1	+8.6

Note: Due to rounding, percentages may not add up to exactly 100%.

*Not applicable represents records coded as “not in labor force or school in last six months”.

Table 12. Relationship Status

The most common response was “single” with over 50% of clients reporting this relationship status at admission and nearly 50% reporting single at follow-up. “Divorced” was the second most common response at admission and “cohabitating” was the second most common response at follow-up.

Relationship Status	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
Single	57.3	54.5	47.4	-7.1
Married	11.0	12.9	14.0	+1.1
Cohabitating	9.2	10.1	17.7	+7.6
Separated	6.1	6.3	4.7	-1.6
Divorced	16.1	15.8	15.7	-0.1
Widowed	0.3	0.5	0.5	0.0

Note: Due to rounding, percentages may not add up to exactly 100%.

Table 13. Living Arrangements

The most common living arrangement reported by clients at both admission and follow-up was living with their parents, with over a quarter of clients who completed the follow-up interview reporting this. At follow-up, living with their significant other and children was the second most common living arrangement (16.5%), followed by living with significant other only (16.3%).

Living Arrangements	OMS Sample at Admission N=896 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)		
		Admission	Follow-Up	Change
Alone	18.3	19.5	15.9	-3.6
Parents	23.8	29.1	27.2	-1.9
Significant Other Only	12.3	13.4	16.3	+2.9
Significant Other and Child(ren)	11.0	10.7	16.5	+5.8
Child(ren) Only	2.6	2.7	5.2	+2.5
Other Adults	16.7	15.7	14.9	-0.8
Other Adults and Child(ren)	3.3	2.0	1.5	-0.5
Jail/Correctional Facility	3.5	1.5	0.0	-1.5
Halfway House, Group Home, Transitional Housing*	5.7	2.5	1.6	-0.9
Shelter, Homeless	2.8	3.0	1.0	-2.0
Hospital	0.2	0.0	0.0	0.0

Note: Due to rounding, percentages may not add up to exactly 100%.

*Included in the halfway house category are clients living in substance abuse 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). Nearly 50% of adults have an education level of high school only at follow-up; an additional 35.7% reported an education level beyond high school. Only 19.1% of adults reported that they did not graduate high school. Over 80% of adolescents and 23.3% of adults reported that they were enrolled in an education program during the six months between discharge and follow-up.

Level of Education	OMS Sample with Completed Follow-Up Interviews N=381 (weighted percent)	
	Adults N=363 (weighted percent)	Adolescents N=18 (weighted percent)
Did Not Graduate High School	19.1	73.3
High School Only *	45.2	26.7
1 to 3 Years Post-Secondary Education	27.2	0.0
4 or More Years Post-Secondary Education	8.5	0.0

Note: Due to rounding, percentages may not add up to exactly 100%.

*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.

In Table 15, the N for each response represents the number of abstinent clients out of the number of total clients who indicated that primary substance at admission. It is important to note that the variability in the percentages of clients abstaining from certain substances is likely 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 oxycontin as a primary substance, compared to 194 people who reported alcohol.



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

Of clients who reported methamphetamine as their primary substance at admission, 77.9% were abstinent at follow-up. Additionally, 60.7% of the clients who indicated marijuana as their primary substance at admission abstained during the follow-period and 48.8% of clients who indicated alcohol 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, $p < 0.01$).

Primary Substance at Admission**	OMS Sample Abstinence at Follow-Up weighted percent (N=380)*
Alcohol	48.8 (95/194)
Cocaine/Crack	57.6 (6/10)
Marijuana/Hashish	60.7 (59/97)
Methamphetamine	77.9 (49/62)
Heroin	0.0 (0/3)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	83.4 (7/8)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	100.0 (1/1)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/4)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	0.0 (0/0)
Inhalants	0.0 (0/0)
Over the Counter	0.0 (0/0)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	100.0 (1/1)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

*Data for one client who reported 'none' as the primary substance at admission and who completed the follow-up interview are not included in this table.

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



In Tables 16 through 23, 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 381 clients who completed a follow-up interview, 217 were abstinent and 164 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 are no statistically significant associations between abstinence and employment at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Employment Status	OMS Sample at Follow-Up N=381	
	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)
Employed Full-Time (≥ 35 hrs/wk)	41.0 (89)	39.8 (65)
Employed Part-Time (< 35 hrs/wk)	17.2 (37)	23.0 (38)
Unemployed (looking for work in the past 30 days)	29.7 (65)	27.4 (45)
Not in Labor Force	12.1 (26)	9.8 (16)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

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.

Change in Employment Status	OMS Sample at Follow-Up N=381	
	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)
Increased Employment	42.7 (93)	42.5 (70)
Maintained Full-Time Employment	14.3 (31)	21.3 (35)
Maintained Part-Time Employment	2.5 (5)	6.3 (10)
Remained Unemployed	17.8 (39)	14.7 (24)
Remained Not in the Labor Force	7.6 (16)	5.8 (10)
Decreased Employment	15.1 (33)	9.3 (15)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.



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. The most common living arrangement for both abstinent and non-abstinent clients was living with parents. There are no significant differences between abstinence and living arrangements at follow-up (Likelihood Ratio Chi-Square Test, $p > 0.05$).

Living Arrangements	OMS Sample at Follow-Up N=381	
	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)
Alone	13.1 (28)	19.7 (32)
Parents	25.7 (56)	29.0 (48)
Significant Other Only	19.7 (43)	11.8 (19)
Significant Other and Child(ren)	18.2 (39)	14.1 (23)
Child(ren) Only	5.7 (12)	4.6 (8)
Other Adults	14.5 (32)	15.3 (25)
Other Adults and Child(ren)	1.3 (3)	1.8 (3)
Jail/Correctional Facility	0.0 (0)	0.0 (0)
Homeless, Shelter	1.2 (3)	0.7 (1)
Halfway House, Group Home, Transitional Housing*	0.6 (1)	2.9 (5)
Hospital	0.0 (0)	0.0 (0/0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.
*Included in the halfway house category are clients living in substance abuse 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. The most common monthly income level for abstinent clients was “\$1001 to \$2000” and non-abstinent clients most commonly report no monthly income. There are no statistically significant associations between abstinence and monthly income at follow-up (Jonckheere-Terpstra Test, $p > 0.05$).

Monthly Income	OMS Sample at Follow-Up N=357*	
	Abstinent weighted percent (N=200)	Non-Abstinent weighted percent (N=157)
None	27.8 (55)	32.5 (51)
\$500 or less	9.4 (19)	5.3 (8)
\$501 to \$1000	16.9 (34)	18.6 (29)
\$1001 to \$2000	36.5 (73)	25.8 (41)
Over \$2000	9.3 (19)	17.8 (28)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.
 * Data from 24 clients who completed a follow-up interview are excluded due to admission records coded as not applicable, disabled, retired, or client declines to disclose income or 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.

Change in Monthly Income	OMS Sample at Follow-Up N=357*	
	Abstinent weighted percent (N=200)	Non-Abstinent weighted percent (N=157)
Increased Monthly Income	52.7 (105)	48.7 (76)
Maintained Over \$2000	0.9 (2)	4.7 (7)
Maintained \$1001 to \$2000	5.5 (11)	6.8 (11)
Maintained \$501 to \$1000	4.0 (8)	1.8 (3)
Maintained \$500 or Less	0.8 (2)	2.6 (4)
Maintained No Income	20.8 (41)	23.5 (37)
Decreased Monthly Income	15.4 (31)	11.9 (19)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.
 * Data from 24 clients who completed a follow-up interview are excluded due to admission records coded as not applicable, disabled, retired, or client declines to disclose income or 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 primary income source at admission and abstinence at follow-up (Likelihood Ratio Chi-Square Test, $p > 0.05$), however there is a statistically significant association between abstinence and primary income source at follow-up and abstinence at follow-up (Likelihood Ratio Chi-Square Test, $p < 0.05$).

Primary Income Source	OMS Sample at Follow-Up N=381			
	Primary Income Source at Admission		Primary Income Source at Follow-Up*	
	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)
None	29.3 (64)	25.2 (40)	0.0 (0)	0.0 (0)
Wages/ Salary	36.1 (78)	45.0 (74)	53.8 (117)	54.2 (89)
Family/ Friends	25.6 (55)	19.6 (32)	26.3 (57)	35.4 (58)
Public Assistance	3.0 (7)	1.2 (2)	3.3 (7)	0.0 (0)
Retirement/ Pension	0.7 (1)	0.0 (0)	1.1 (2)	0.0 (0)
Disability	1.8 (4)	3.8 (6)	3.3 (7)	3.5 (6)
SSI and SSDI	1.7 (4)	1.7 (3)	2.3 (5)	1.2 (2)
Other	2.0 (4)	4.0 (7)	9.9 (22)	5.7 (9)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

*Statistically significant (Likelihood Ratio Chi-Square Test, $p < 0.05$).

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, $p < 0.0001$). The percentage of abstinent clients who reported no arrests during the follow-up period (91.3%) was higher than the percentage of non-abstinent clients who reported no arrests (73.5%). The percentage of non-abstinent clients who reported being arrested one to three times at follow-up (26.5%) was over three times higher than that of the abstinent clients (8.7%) reporting the same arrest frequency.

Arrests*	OMS Sample at Follow-Up N=381	
	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)
None	91.3 (198)	73.5 (120)
1 to 3 Times	8.7 (19)	26.5 (44)
4 or More Times	0.0 (0)	0.0 (0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

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

Table 23. AA, NA, or Similar Meetings Attended at Follow-Up by Abstinence at Follow-Up

Of the 381 clients who completed a follow-up interview, 46.6% reported attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar meetings in the six months following discharge. There are no statistically significant associations 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=381	
	Abstinent weighted percent (N=217)	Non-Abstinent weighted percent (N=164)
None	55.3 (120)	51.1 (84)
1 or More Meetings	44.7 (97)	48.9 (80)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

OUTCOMES: ARRESTS AND EMPLOYMENT

Table 24 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 N for each response represents the number of clients with no arrests at follow-up out of the number of total clients who indicated that substance at admission.



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

Of the clients who reported methamphetamine as the primary substance at admission, 88.6% were arrest-free at follow-up. Additionally, 84.6% of clients indicating alcohol as the primary substance at admission and 82.3% of clients reporting marijuana as the primary substance at admission were arrest-free. There is a statistically significant association between primary substance at admission and no arrests at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$).

Primary Substance at Admission**	OMS Sample No Arrests at Follow-Up weighted percent (N=380)*
Alcohol	84.6 (164/194)
Cocaine/Crack	87.8 (9/10)
Marijuana/Hashish	82.3 (80/97)
Methamphetamine	88.6 (55/62)
Heroin	66.0 (2/3)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	87.2 (7/8)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	100.0 (1/1)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/4)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	0.0 (0/0)
Inhalants	0.0 (0/0)
Over the Counter	0.0 (0/0)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	0.0 (0/1)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

*Data for one client who reported 'none' as the primary substance at admission and who completed the follow-up interview are not included in this table.

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



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-time (35 or more hours per week) at follow-up, or not being employed full-time at follow-up. The N for each response represents the number of clients who were employed full-time at follow-up out of the number of total clients who indicated that substance at admission.

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

Six months following discharge, 46.3% of clients reporting methamphetamine as the primary substance at admission were employed full-time. In addition, 41% of clients indicating alcohol and 40.9% of clients reporting marijuana were employed full-time at follow-up. There are no significant differences between full-time employment at follow-up and primary substance reported at admission (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Primary Substance at Admission	OMS Sample Employed Full-Time at Follow-Up weighted percent (N=380)*
Alcohol	41.0 (80/194)
Cocaine/Crack	28.0 (3/10)
Marijuana/Hashish	40.9 (40/97)
Methamphetamine	46.3 (29/62)
Heroin	0.0 (0/3)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	27.8 (2/8)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	0.0 (0/1)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/4)
Other Tranquilizers	0.0 (0/0)
Barbiturates	0.0 (0/0)
Other Sedatives and Hypnotics	0.0 (0/0)
Inhalants	0.0 (0/0)
Over the Counter	0.0 (0/0)
Steroids	0.0 (0/0)
Ecstasy	0.0 (0/0)
Oxycontin	100.0 (1/1)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

*Data for one client who reported 'none' as the primary substance at admission and who completed the follow-up interview are not included in this table.



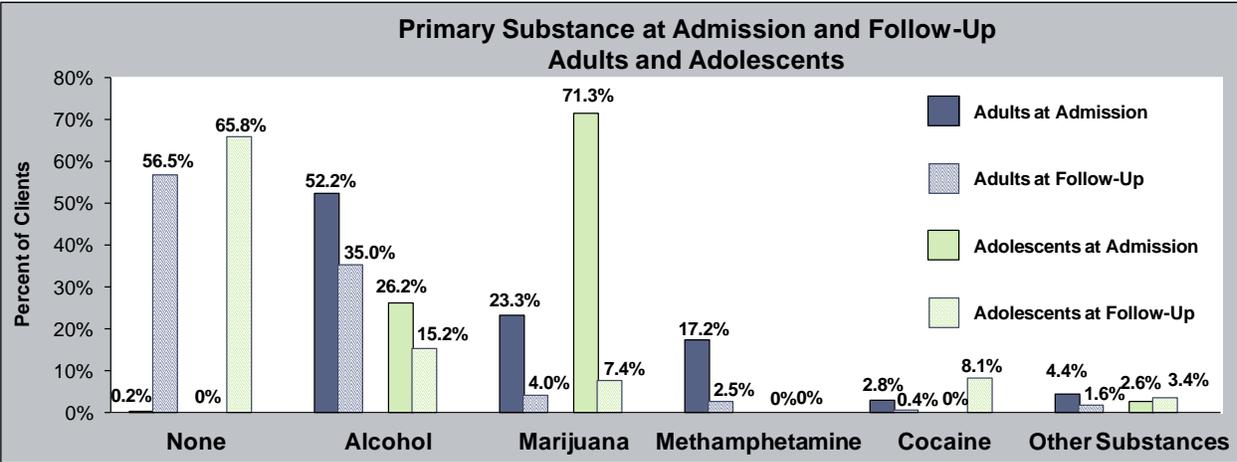
OUTCOMES: AGE AND SEX

Figures 4 through 6 present selected variables at admission and follow-up presented by age and sex. Age is separated into two groups: adults (18 and older) and adolescents (17 and younger). Of the 381 clients who completed the follow-up interview, 363 were adults (95.3%) and 18 were adolescents (4.7%). There were 259 males (68%) and 122 females (32%). The variables presented include primary substance and frequency of use of primary substance forreported using the same primary substance at both admission and follow-up.

The four primary substances that clients reported most often were alcohol, marijuana, methamphetamine, and cocaine (see Table 1 on page 7). Figure 4 shows the percentages of adults and adolescents and Figure 5 shows the percentage of males and females related to these four substances at admission and follow-up.

Figure 4. Primary Substance at Admission and Follow-Up by Age

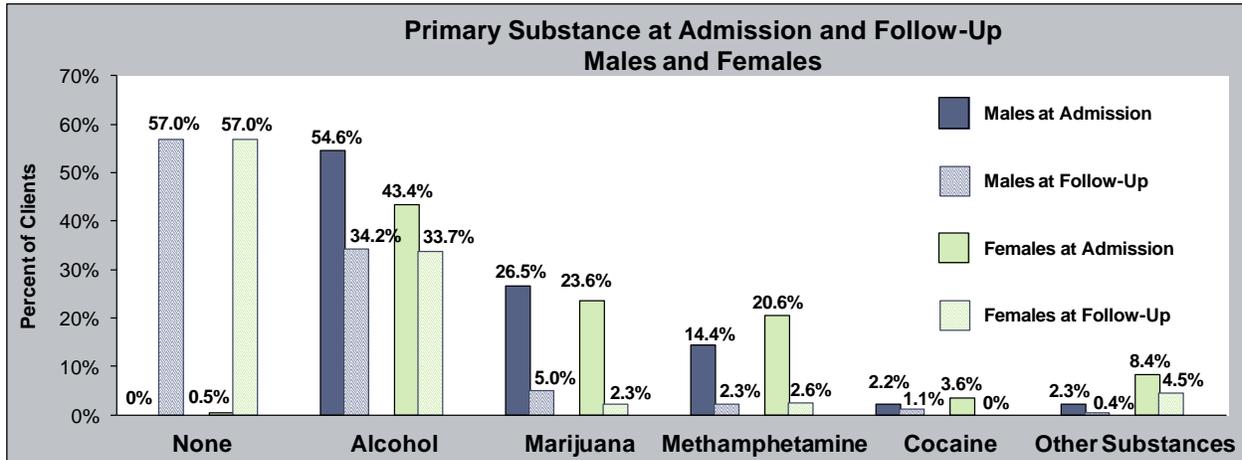
At admission, alcohol was the most frequently reported primary substance among adults while marijuana was the most common among adolescents. Over half of the adults at admission (52.2%) reported alcohol as the primary substance compared to just over a quarter of adolescents (26.2%). Over 70% of adolescents indicated marijuana as the primary substance at admission compared to fewer than a quarter of the adults (23.3%). At follow-up, 65.8% of the adolescents and 56.5% of the adults reported abstinence during the six months following discharge from treatment. Alcohol was the most frequently reported primary substance at follow-up by both groups, indicated by 35% of adults and 15.2% of the adolescents.



Note: Due to rounding, percentages may not add up to exactly 100%.

Figure 5. Primary Substance at Admission and Follow-up by Sex

At follow-up, 57% of both males and females reported abstinence during the six months following discharge from treatment. At admission, a higher percentage of females (20.6%) than males (14.4%) reported methamphetamine as their primary substance, while a higher percentage of males (54.6%) than females (43.4%) indicated alcohol as the primary substance. At follow-up there was a higher percentage of males (5%) than females (2.3%) who reported marijuana as their primary substance.

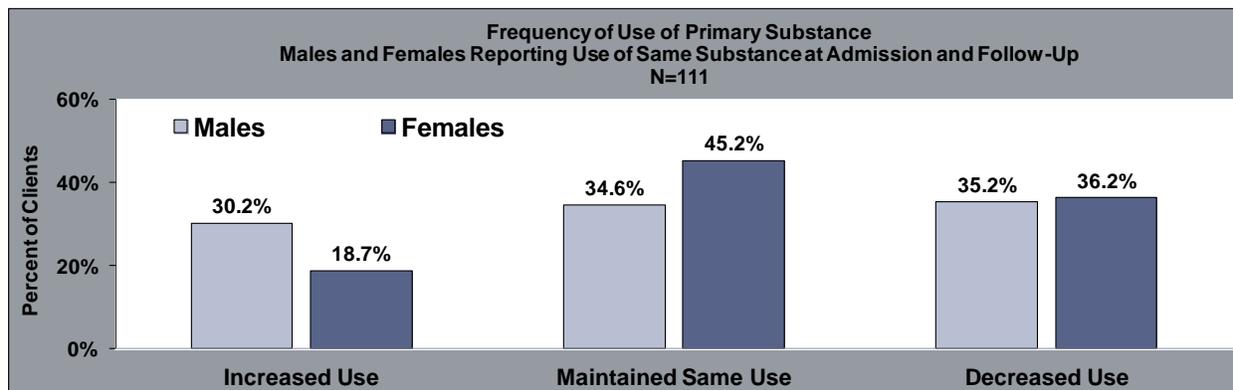


Note: Due to rounding, percentages may not add up to exactly 100%.

Figure 6 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 include *only* clients who reported use at follow-up (111 clients). Data for frequency of use of primary substance by age are not included in this report due to the low number of adolescents reporting use at follow-up (2 clients). Figure 6 shows the percentage of males and females in association with the frequency of use of their primary substance at admission and follow-up. For this subset of 111 clients, 81 clients (73%) were male and 30 clients (27%) were female.

Figure 6. 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 (30.2% and 18.7% respectively). Nearly half of the females (45.2%) reported the same frequency of use at both admission and follow-up compared to 34.6% of males. Approximately one third of both males and females (35.2% and 36.2% respectively) indicated a decrease in use of their primary substance from admission to follow-up.



Note: Due to rounding, percentages may not add up to exactly 100%.

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 full-time employment), discharge status by the three outcome variables, and length of stay by primary substance at admission. In Tables 26 and 27, the number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate.

In Table 26 on the following page, the first column presents the length of stay categories; the second column presents the approximate number of clients (due to weighting) with completed follow-up interviews in each length of stay category. The third column presents the percentage of clients who had no substance use during the follow-up period for each length of stay range; numbers in parentheses represent the approximate number of clients who were abstinent. For example, 15 of the 27 clients (weighted percent = 54.8%) who were in treatment less than



seven days were abstinent at follow-up. Data in the “no arrests” and “employed full-time” columns are presented in the same manner as the “abstinent” column.

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

The most common length of stay for clients who completed the follow-up interview was 31-60 days, with 90 of clients (23.6%) in this category. There are no significant differences between length of stay and outcome variables at follow-up (Jonckheere-Terpstra Test, $p > 0.05$).

OMS Sample at Follow-Up N=381				
Length Of Stay	N	Abstinent weighted percent (N)	No Arrests weighted percent (N)	Employed Full-Time weighted percent (N)
Less Than 7 Days	27	54.8 (15)	85.0 (23)	30.3 (8)
7 - 30 Days	77	58.6 (45)	81.6 (63)	32.2 (25)
31 - 60 Days	90	54.7 (49)	83.9 (76)	48.3 (44)
61 - 90 Days	65	55.6 (36)	75.3 (49)	33.4 (22)
91 - 120 Days	67	71.7 (48)	94.9 (63)	52.7 (35)
More than 120 Days	55	43.1 (24)	81.4 (45)	37.7 (21)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

Table 27 on the following page shows the three outcome variables for the follow-up interview (abstinence, no arrests, and full-time 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, referral to another program, incarceration, or death). The first column presents the discharge categories. The second column presents the approximate number of clients with completed follow-up interviews in each discharge category. The third column presents the percentage of clients who reported abstinence at follow-up (had no substance use during the follow-up period) for each discharge category; numbers in parentheses represent the approximate number of clients (due to weighting) who were abstinent. For example, 145 of the 248 clients (weighted percent = 58.3%) who were successfully discharged were abstinent at follow-up. Data in the “no arrests” and “employed full-time” columns are presented in the same manner as the “abstinent” column. It is important to note that clients who were successfully discharged comprise the majority of the clients interviewed: 65.4% of the clients in Table 27.



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

Of the 381 clients who completed a follow-up interview, 379 are represented in Table 27; discharge data for two clients are omitted (because of invalid codes). Of the 379 clients, 248 clients (65.4%) were discharged as successful cases and 131 clients (34.6%) did not successfully complete the treatment program. Of the 131 clients who did not complete treatment, 107 were terminated and 24 were neutral discharges. Of the 248 clients who completed follow-up interviews and were successfully discharged: 58.3% were abstinent, 89.3% had not been arrested; and 49.2% were working full-time. There are statistically significant associations between discharge status and no arrests at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$) and between discharge status and full-time employment at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.0001$). 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=379				
Discharge Status	N	Abstinent weighted percent (N)	No Arrests* weighted percent (N)	Employed Full-Time** weighted percent (N)
Successful Completion	248	58.3 (145)	89.3 (222)	49.2 (122)
Terminated	107	55.0 (59)	70.8 (76)	24.2 (26)
Neutral Discharge	24	49.3 (12)	81.4 (20)	25.2 (6)
Total	379	56.8 (216)	83.6 (317)	40.6 (154)

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.

*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 7 and Table 28 on the following pages are drawn from all discharged clients who were in the 2010 OMS sample. As of September 7, 2011, of the 896 clients in the OMS sample, discharge information had been received for 811 clients and 85 were still receiving treatment services. The most often reported primary substances at admission are: alcohol, marijuana, methamphetamine, and cocaine (see Table 1, page 7). Figure 7 presents the median length of stay for discharged clients for each of the four primary substances reported at admission. Table 28 presents the percentage of clients in each length of stay category for the four substances.

Figure 7. Median Length of Stay by Primary Substance at Admission

Clients whose primary substances at admission were marijuana and methamphetamine had the longest median length of stays of 63 days. Clients who indicated alcohol as the primary substance at admission had a median length of stay of 54 days. Clients whose primary substance at admission was cocaine had the shortest median length of stay of 47 days.

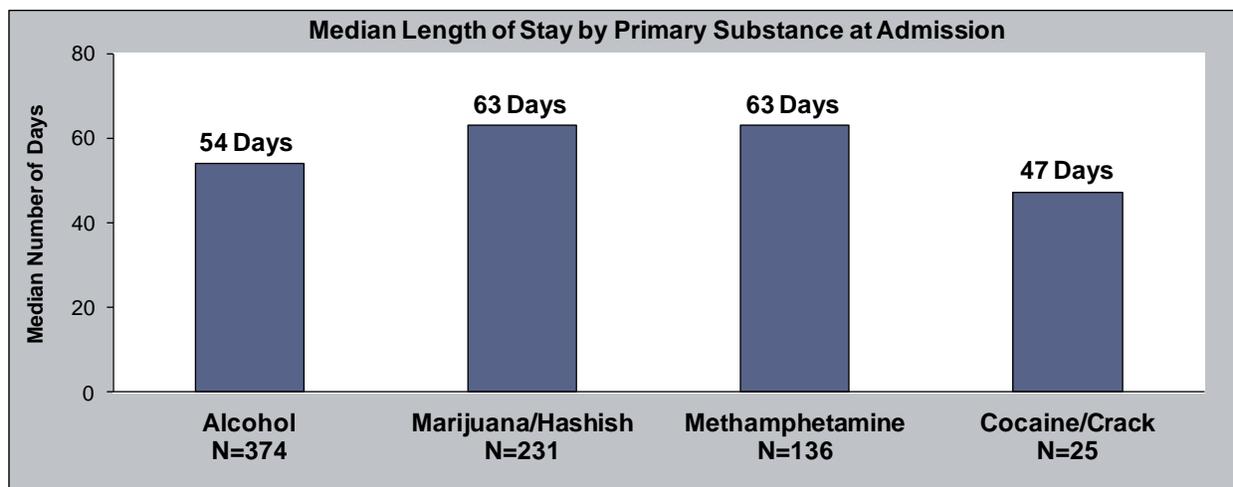


Table 28. Length of Stay by Primary Substance at Admission

There is a statistically significant association between length of stay for clients who reported alcohol as the primary substance at admission compared to clients who reported other primary substances at admission (Jonckheere-Terpstra Test, $p < 0.05$). The length of stay category with the largest percentage of clients reporting alcohol, marijuana, and methamphetamine as the primary substances at admission was 31 to 60 days and the category with the largest percentage of clients indicating cocaine was the 7 to 30 days category.

Primary Substance at Admission	N	Length of Stay					
		Less Than 7 Days weighted percent	7 – 30 Days weighted percent	31 – 60 Days weighted percent	61 – 90 Days weighted percent	91 – 120 Days weighted percent	More than 120 Days weighted percent
Alcohol*	374	9.3	21.8	23.2	13.1	13.4	19.1
Marijuana/Hashish	231	4.4	18.2	24.0	18.3	17.1	18.1
Methamphetamine	136	9.4	15.5	20.8	15.9	20.1	18.2
Cocaine/Crack	25	5.1	33.5	25.5	15.7	1.8	18.4

Note: Due to rounding, percentages may not add up to exactly 100%.

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

CLIENTS' PERCEIVED BENEFITS

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 abuse treatment programs. Results from 381 completed interviews at six months post discharge indicate that 92.6% of the clients feel that the substance abuse treatment they received was either very beneficial or beneficial overall. "Beneficial" was the response indicated most often for individual, group, and educational counseling. Clients who responded "did not receive" for a certain type of counseling could have done so for various reasons including that 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=381					
Perceived Benefit of Counseling	Individual Counseling % (N=381)	Family Counseling % (N=381)	Group Counseling % (N=381)	Educational Counseling % (N=381)	Overall Rating of Treatment Program % (N=381)
Very Beneficial	44.1 (168)	3.1 (12)	32.7 (124)	32.1 (122)	44.1 (168)
Beneficial	45.3 (172)	5.1 (20)	43.7 (167)	47.4 (180)	48.5 (185)
Not Beneficial	9.4 (36)	1.4 (5)	11.6 (44)	16.5 (63)	7.4 (28)
Did Not Receive	1.3 (5)	90.4 (344)	12.0 (46)	4.1 (16)	Not Applicable

Note: The number of clients is rounded to the nearest integer due to weighting of the data; therefore, the numbers of clients are approximate but the percentages are accurate. Due to rounding, percentages may not add up to exactly 100%.



APPENDIX: PRESENTATION OF TRACKING DATA

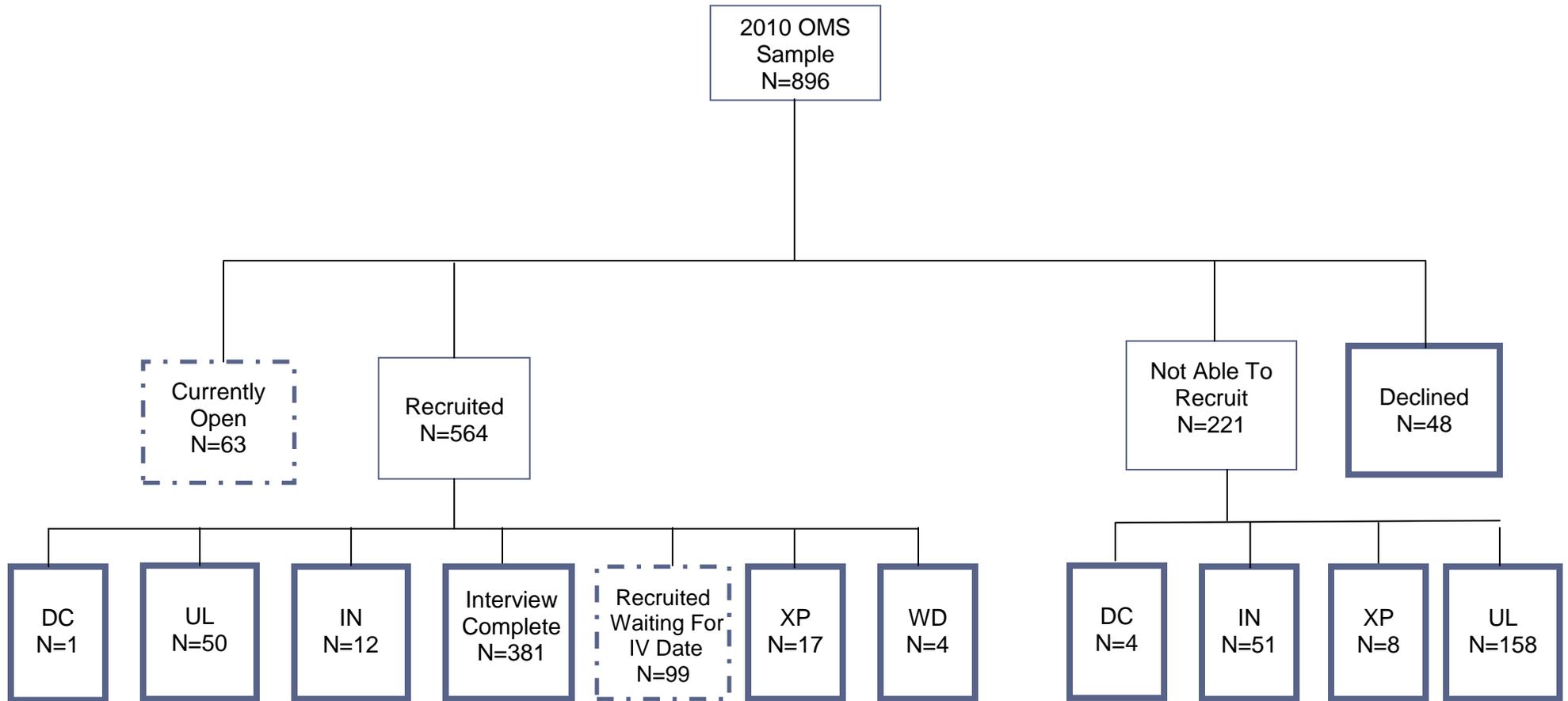
Table A1. Client Classifications	32
Figure A1. Classification of 2010 OMS Sample	33
Tracking Report: 2010 OMS Sample.....	34
Table A2. Case Status – All Clients	34
Table A3. Closed Clients by Category	34
Table A4. Recruitment and Follow-Up Rates	34
Client Contacts: 2010 OMS Sample.....	35
Table A5. Type and Number of Client Contacts through September 7, 2011	35
Table A6. Contacts for Clients with Closed Cases.....	36



Table A1. Client Classifications

Sample Size	The total number of clients who have been randomly selected for inclusion in the OMS project.
Currently Open	This includes clients that staff is actively trying to locate and recruit, however has 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	This includes clients who at some point agreed to participate in the follow-up interview. Included are clients who were recruited but incarcerated at the time of their interview, were recruited but could not be located at the time of their interview, were recruited and interviewed, were recruited but waiting for their interview date, were recruited but their interview date had expired at the time the Consortium received notice of their discharge date, were recruited but withdrew from the project, or were recruited but were deceased before their interview date.
Not Able to Recruit	This includes clients that staff has never been able to successfully contact. Included are clients who had not been successfully contacted and were incarcerated at the time of their interview date, clients who staff were unable to locate despite months of effort, clients who had not been contacted but had a potential interview date that had already passed when the Consortium received notice of the clients' discharge date, and clients who were deceased before staff could contact them.
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. The client may or may not have been successfully recruited. 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.
Recruited- In Progress	Client agreed to take part in the follow-up interview. Client will receive update calls and/or letters until the interview date nears. Case will close when interview takes place.
Unable to Locate	Staff was not able to make contact with the client either via the telephone or mail at time interview was due to take place. Client may have initially been contacted and 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.

Figure A1. Classification of 2010 OMS Sample



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

*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: 2010 OMS Sample

Table A2. Case Status – All Clients

Status	Number of Clients
Open Cases	162
Closed Cases	734
Total	896

Table A3. Closed Clients by Category

Category	Number of Clients	Percentage of Clients
Follow-Up Interview Complete	381	51.9
Unable to Locate	208	28.3
Declined or Withdrew Participation	52	7.1
Incarcerated	63	8.6
Expired	25	3.4
Deceased	5	0.7
Total	734	100.0

Due to rounding, percentages may not add up to exactly 100%.

Table A4. Recruitment and Follow-Up Rates

Category	Percentage
Recruitment	73.2 (564/770)
Follow-Up	87.6 (381/435)



Client Contacts: 2010 OMS Sample

Table A5. Type and Number of Client Contacts through September 7, 2011

Type of Contact	Adolescents N=29	Adults N=837	Total N=896
An outgoing phone call attempting to recruit client.	229	5,415	5,644
An outgoing phone call in which recruitment has actually taken place and the client has agreed to participate.	24	416	440
An incoming phone call in which recruitment has actually taken place and the client agreed to participate.	11	117	128
An outgoing phone call attempting to update/check-in with client.	67	1,391	1,458
An incoming or outgoing phone call in which a successful update occurs with client.	26	444	470
An incoming phone call from client or collateral contact (not from treatment agency).	14	226	240
An outgoing phone call attempting to reach client for the six month follow-up interview.	150	3,246	3,396
An outgoing phone call completing the six month follow-up interview.	22	297	319
An incoming phone call in which the six month follow-up interview is completed.	7	55	62
An outgoing phone call attempting to track client through collateral contacts.	2	38	40
Any incoming and outgoing attempts (phone call/letter/fax/email) to track client through their substance abuse treatment agency.	4	100	104
Other - usually an internet search, but includes any call/contact that doesn't fall under any other category.	35	1,633	1,668
A letter sent to contact client; includes letters that have been returned and notification of address changes from post office; outgoing or incoming.	197	4,164	4,361
All Client Contacts	788	17,542	18,330



Table A6. Contacts for Clients with Closed Cases*

Status	Clients	All Contacts	Contacts (Mean)	Number of Letters Mailed
Interviews Completed	381	6,713	17.6	1,554
Unable to Locate	208	6,285	30.2	1,519
Declined	48	524	10.9	105
Incarcerated	63	1,134	18.0	226
Expired	25	444	17.8	98
Withdrew	4	159	39.8	17
Deceased	5	26	5.2	6
Grand Total	734	15,285	20.8	3,525

* Information in Table A6 represents only closed cases. Cases are closed for 734 of the 896 clients (81.9%) in this report.

