

State of Iowa

Outcomes Monitoring System

THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

**Year 15
Annual Outcome Evaluation Report
September 2013**

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Iowa Department of Public Health,
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State of Iowa Outcomes Monitoring System

**Year 15 Annual Evaluation Report
September 2013**

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

EXECUTIVE SUMMARY

The Outcomes Monitoring System (OMS) was established to systematically gather data on substance abuse treatment outcomes in Iowa. Randomly selected clients from 22 Iowa Department of Public Health-funded treatment agencies were contacted for follow-up interviews that occurred approximately six months after discharge from treatment. This report examines outcomes for clients admitted in calendar year 2012. Outcomes are presented for 332 of the clients who completed the follow-up interview.

Client Characteristics of 2012 OMS Sample

Age and Sex: Clients ranged from 13 to 73 years of age with a median age of 32 years. Nearly 70% clients of the clients were male and 30% were female.

Race and Ethnicity: Nearly 89% of the clients reported Caucasian/White as their primary race at admission, 8.5% reported African American/Black, 1.2% reported American Indian, and 0.8% reported another race. Approximately 1% responded “unknown” when asked about their race or the data were missing or reported as not collected. Nearly 4% of the clients reported Hispanic or Latino ethnicity at admission.

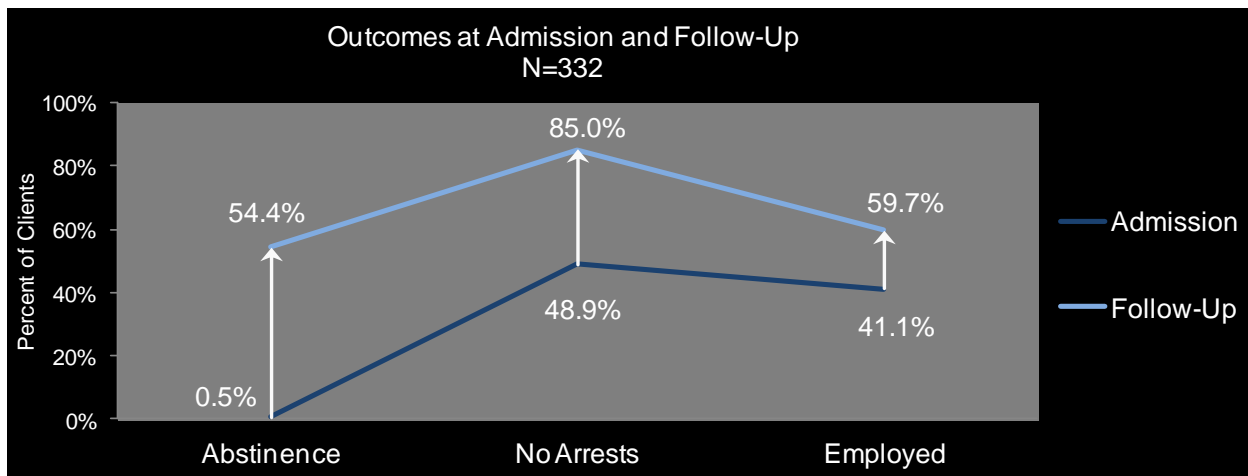
Substance Use at Admission: At admission, 99.8% of the clients indicated a primary substance of use. Alcohol was the most common primary substance reported by 44.1% of the clients, followed by marijuana (27.6%) and methamphetamine (18.3%).

Outcomes for 332 Clients with Completed Follow-Up Interviews

The following data describe outcomes at admission and follow-up for 332 clients who have completed the follow-up interview.

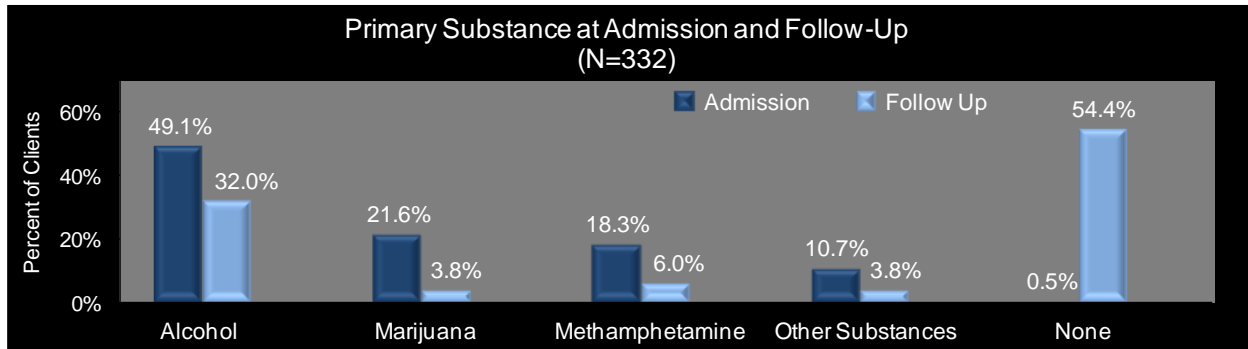
Abstinence, Arrests, and Employment at Admission and Follow-Up

Abstinence (based on the primary substance reported) increased by 53.9 percentage points from admission to follow-up. Over half of the clients (51.1%) reported arrests at admission, whereas 15% reported arrests at follow-up. Employment (full or part-time) increased by 18.6 percentage points; nearly 60% of clients indicated employment at follow-up.



Primary Substance at Admission and Follow-Up

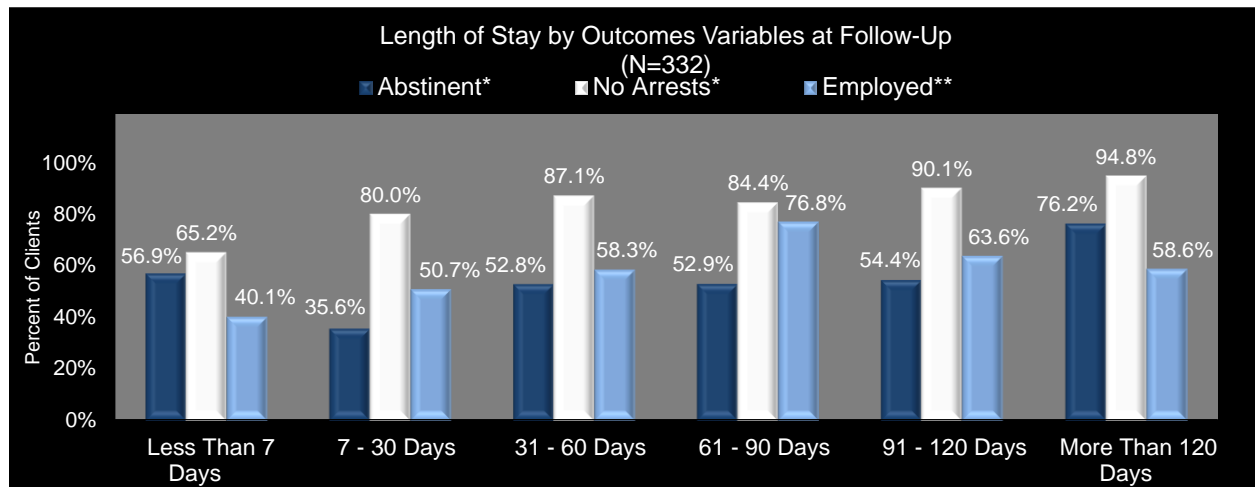
At both admission and follow-up, alcohol was the most commonly reported primary substance. Marijuana was the second most commonly reported primary substance at admission, followed by methamphetamine. At follow-up, methamphetamine was the second most frequently reported primary substance, followed by marijuana. Over half of the clients (54.4%) 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.

Length of Stay by Outcomes Variables at Follow-Up

The median length of stay in treatment for clients completing the follow-up interview was 67 days, with a range of zero to 312 days. The two most common length of stay categories were 7-30 days and 61-90 days, with 20.5% of clients completing follow-up interviews in each of these categories. There were statistically significant associations between length of stay and abstinence (Jonckheere-Terpstra Test, $p < 0.001$), length of stay and arrests (Jonckheere-Terpstra Test, $p < 0.001$), as well as length of stay and employment at follow-up (Jonckheere-Terpstra Test, $p < 0.05$). Of clients completing the follow-up interview who received treatment for more than 120 days, 76.2% reported abstinence since treatment discharge, nearly 95% had not been arrested, and nearly 60% were employed full or part-time.



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

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

Additional questions were added to the follow-up interview in 2013, including questions regarding mental health. Future reports will analyze these new questions.



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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 analyses, and reporting since January 1999.

The Consortium conducts follow-up interviews with randomly selected clients from 22 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 2012. Outcomes are presented for 332 clients who completed the follow-up interview through September 3, 2013.

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. Additional questions were added to the follow-up interview in 2013, including questions regarding mental health assessments, referrals, and medications prescribed during substance abuse treatment for emotional reasons. Clients are also asked for a self-rating of overall health six months following treatment discharge. Data collected from clients will be included in subsequent reports.

Sampling Procedure 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 obtained by the Consortium from IDPH. Given that the number of admissions varies from month to month, the sample size also varies. In January 2013, the monthly random sample size was increased from approximately 8% to 10% of the available admission records for the adult and adolescent client population admitted to treatment in a month. Monthly samples which contained 2012 admissions had an average size of 77 clients with a range of 56 to 91 clients.

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 information that includes 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 agencies 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

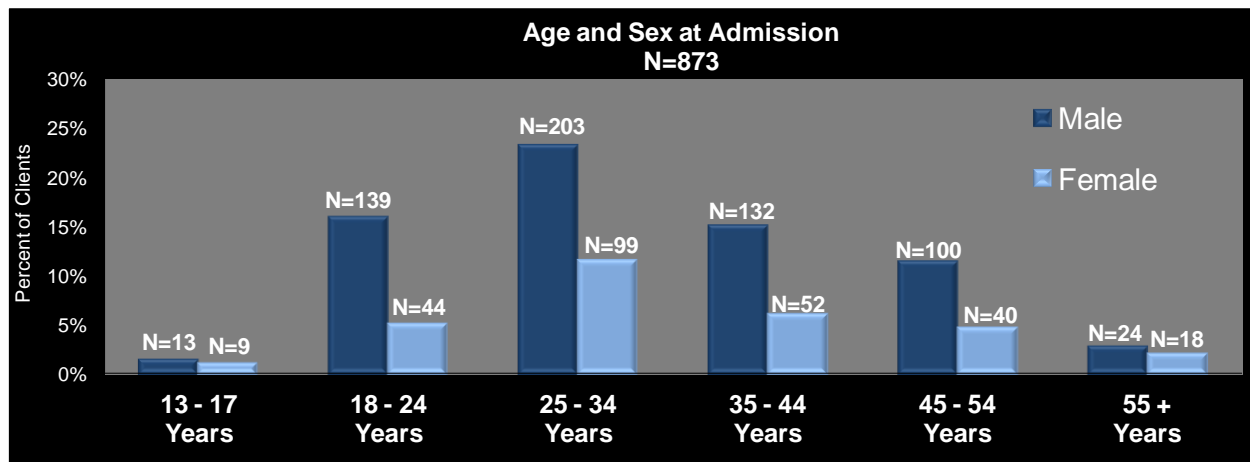
Description of Clients at Admission

Eight hundred seventy-four clients with 2012 admission dates were selected to participate in the OMS project. This group of randomly selected clients had substance abuse treatment admission dates from January 3, 2012 through December 31, 2012.

Clients ranged from 13 to 73 years of age with a median age of 32 years. Of the 874 clients, 22 (2.5%) were adolescents (age 17 and younger) and 852 (97.5%) were adults. Six hundred eleven clients (69.9%) were male and 262 (30%) were female; sex was reported as “unknown” for one client 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 although the difference is reduced in the youngest and oldest age groups.

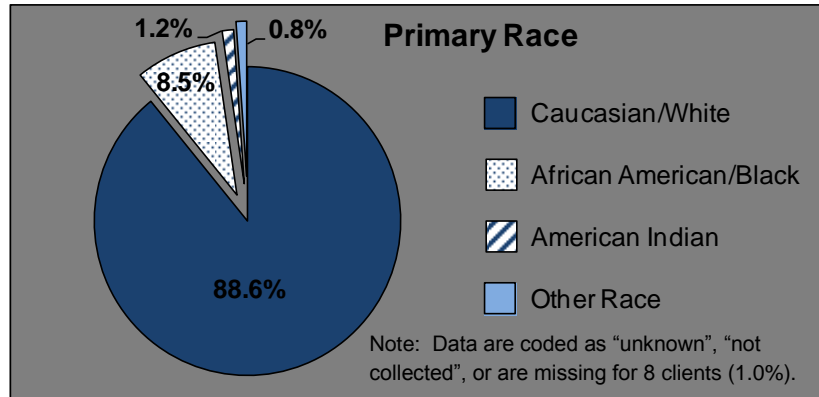
Figure 1. Age and Sex at Admission



Note: The number of clients is rounded to the nearest integer due to the weighting of the data. Data are missing for one client because sex was reported as “unknown” at admission.

Figure 2. Race

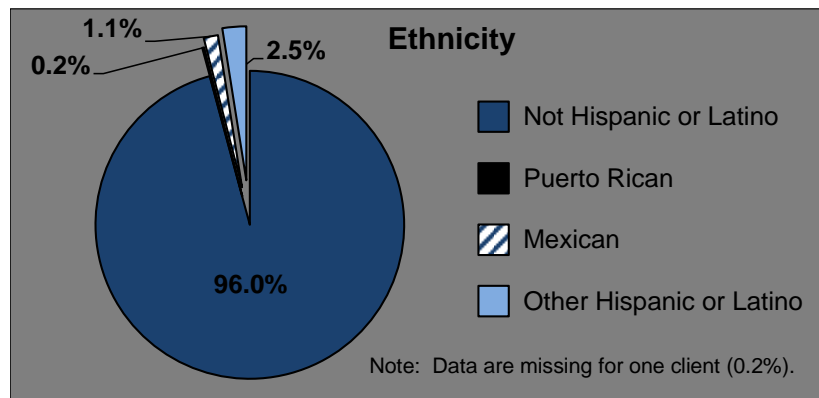
Figure 2 presents race reported at admission for clients in the OMS sample. Seven hundred seventy-five clients reported Caucasian/White as their primary race at admission; 74 clients reported African American/Black, 10 clients reported American Indian, and seven clients reported “other race”. The “other race” category includes clients who reported Alaskan Native, Asian, or Hawaiian or Pacific Islander as their primary race. Additionally, there were eight clients who responded “unknown” when asked about their race or the data were missing or reported as “not collected”.



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

Figure 3. Ethnicity

Figure 3 shows ethnicity reported at admission for the 874 clients in the OMS sample. Thirty-three individuals (3.8%) reported Hispanic or Latino ethnicity at admission.



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

Recruitment, Tracking, and Follow-Up Efforts

As of September 4, 2013, of the 874 clients who were selected to participate in the OMS project, 540 individuals had been contacted by Consortium staff and consented to participate in the follow-up interview; 82 clients declined to participate in the project.

Six hundred fifty-four of the clients had reached six months post discharge and were eligible to complete the follow-up interview. Of these, 332 clients completed a follow-up interview. There were 74 recruited individuals who could not be located for the interview after numerous phone calls, letters, and internet searches. Nineteen clients were incarcerated at the time of their interview; Consortium staff do not interview incarcerated individuals. Interview due dates had already passed for 10 recruited clients when the Consortium received notification of their discharge dates, 10 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 208 clients were not able to be recruited for various reasons including: 152 clients could not be located; 36 clients were incarcerated (Consortium staff do not recruit incarcerated individuals);



treatment agency staff submitted discharge dates late for 17 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 44 clients who are still not eligible for an interview. The remaining 94 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 (540), those who declined to participate (82), and non-recruited clients whom staff were not able to locate (152). This calculation results in a recruitment rate of 69.8%. Of the recruited clients due for a follow-up interview who were not incarcerated or deceased (416 clients), 79.8% received an interview. This calculation includes all clients who completed the follow-up interview (332), recruited clients who could not be located when their interview was due (74), and those who decided not to take part in the interview after initially agreeing to do so (10). 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 874 clients admitted in 2012 in the OMS sample and admission and follow-up responses from clients who have completed follow-up interviews (332 clients). The first column presents all possible responses for the question. The second column presents the admission responses for the 874 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 (332 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 reported by 44.1% of the 874 clients in the OMS sample. At follow-up, alcohol was also the most often indicated primary substance with 32% of clients reporting use at follow-up. Marijuana was the second most commonly reported primary substance at admission, followed by methamphetamine. At follow-up, methamphetamine was the second most frequently reported substance, followed by marijuana.
- **Secondary Substance:** A secondary substance was reported by 60.1% of clients in the OMS sample at admission. Marijuana was the most commonly used secondary substance at admission and follow-up, indicated by 23.5% of the 874 clients in the sample at admission and 5% of the 332 clients completing follow-up interviews. Among the 332 clients who completed a follow-up interview, clients reporting “no secondary substance” increased from 44% at admission to 89.5% at follow-up, therefore, just over 10% of clients reported using more than one substance at follow-up.
- **Arrests:** At admission, over half of the clients in the OMS sample reported one or more arrests in the previous twelve months, while 15% of the clients reported arrests in the six months following treatment discharge.



- **Employment:** At admission, 38.5% of clients in the OMS sample indicated full or part-time employment. At follow-up, nearly 60% reported they were employed full or part-time. Among the 332 clients completing the follow-up interview, clients indicating full-time employment increased by over 18 percentage points 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 three highest monthly income categories (\$501 to \$1000, \$1001 to \$2000, and over \$2000) at follow-up. There was a slight decrease (8.7 percentage points) in clients who indicated they had no monthly income: nearly half (49.7%) reported this at admission and 41% reported this at follow-up.
- **Hospitalizations:** There was over a fourfold decrease in the number of clients who were hospitalized at follow-up compared to admission: 2.7% interviewed indicated one or more hospitalizations due to a substance abuse-related problem during the six months post discharge time period; at admission, 11.6% reported substance abuse-related hospitalizations in the six months prior to treatment admission.
- **Voluntary Self-Help Groups for Recovery:** Clients reporting attending meetings such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or similar meetings more than doubled from admission to follow-up, over 40% of clients reported attending meetings during the six months following discharge from treatment.



Table 1. Primary Substance

At admission, nearly all clients (99.8%) indicated a primary substance. At follow-up, over half of the clients (54.4%) 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 17.1 percentage points between admission (49.1%) and follow-up (32%) for clients reporting alcohol as the primary substance. Marijuana was the second most commonly reported primary substance at admission, followed by methamphetamine. Methamphetamine was the second most commonly reported primary substance at follow-up, followed by marijuana. The percentage of clients reporting marijuana as their primary substance decreased from 21.6% at admission to 3.8% at follow-up (17.8 percentage points). The percentage of clients reporting methamphetamine as their primary substance decreased by 12.3 percentage points (from 18.3% to 6%).

Primary Substance	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)	
		Admission	Follow-Up
None	0.2	0.5	54.4
Alcohol	44.1	49.1	32.0
Cocaine/Crack	2.8	2.7	1.9
Marijuana/Hashish	27.6	21.6	3.8
Methamphetamine	18.3	18.3	6.0
Heroin	1.9	2.1	0.1
Non-Prescription Methadone	0.0	0.0	0.0
Other Opiates and Synthetics	3.3	3.4	1.4
PCP	0.0	0.0	0.0
Other Hallucinogens	0.2	0.3	0.0
Other Amphetamine	0.2	0.4	0.0
Other Stimulants	0.0	0.0	0.0
Benzodiazepines	0.4	0.7	0.0
Other Tranquilizers	0.0	0.0	0.0
Barbiturates	0.0	0.0	0.0
Other Sedatives and Hypnotics	0.1	0.0	0.0
Inhalants	0.0	0.0	0.0
Over the Counter	0.0	0.0	0.0
Steroids	0.0	0.0	0.0
Ecstasy	0.0	0.0	0.0
Oxycontin	0.7	1.1	0.0
Other Prescribed Analgesics	0.1	0.0	0.0
Other	0.1	0.0	0.4

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 45.5 percentage points from 44% at admission to 89.5% at follow-up; just over 10% of the clients reported using more than one substance six months post discharge. The most common secondary substance reported at admission and follow-up was marijuana. There were decreases between admission and follow-up for clients reporting the two most commonly used secondary substances, alcohol and marijuana, 14.7 and 17.8 percentage points respectively.

Secondary Substance	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)	
		Admission	Follow-Up
None	39.9	44.0	89.5
Alcohol	20.1	19.1	4.4
Cocaine/Crack	3.2	3.1	0.0
Marijuana/Hashish	23.5	22.8	5.0
Methamphetamine	8.5	7.0	0.8
Heroin	0.0	0.0	0.2
Non-Prescription Methadone	0.1	0.0	0.0
Other Opiates and Synthetics	1.9	1.7	0.0
PCP	0.1	0.0	0.0
Other Hallucinogens	0.2	0.3	0.0
Other Amphetamine	0.3	0.0	0.0
Other Stimulants	0.2	0.0	0.0
Benzodiazepines	1.1	0.4	0.0
Other Tranquilizers	0.0	0.0	0.1
Barbiturates	0.3	0.8	0.0
Other Sedatives and Hypnotics	0.1	0.0	0.0
Inhalants	0.0	0.0	0.0
Over the Counter	0.1	0.3	0.0
Steroids	0.0	0.0	0.0
Ecstasy	0.2	0.3	0.0
Oxycontin	0.1	0.0	0.0
Other Prescribed Analgesics	0.0	0.0	0.0
Other	0.2	0.2	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. Of clients reporting substance use during the six month post-discharge time period, 72.2% reported the same primary substance at both admission and follow-up and 27.8% reported a different primary substance at follow-up than the primary substance reported at 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 109 clients most commonly reported using their primary substance less frequently at follow-up compared to admission (42.1%); 30.7% of clients in this group indicated the same use pattern of their primary substance at both admission and follow-up; and 27.2% 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=109 (weighted percent)
Increased Use	27.2
Maintained Same Use	30.7
Decreased Use	42.1

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

In addition to the 109 clients represented in Table 3 above, 42 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). Slightly over half (52.4%) identified that their primary substance at follow-up was the substance they originally reported as their secondary substance at admission. Over 40% of the 42 individuals in this group switched from marijuana to alcohol; 17.3% changed from methamphetamine to alcohol; and 10.5% switched from marijuana to methamphetamine.



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. The number of clients reporting attending meetings more than doubled 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 N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
None	82.3	83.3	59.8	-23.5
1 to 10 Meetings	13.2	11.9	30.3	+18.4
11 or More Meetings	4.5	4.8	9.9	+5.1

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

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 50% of clients reported arrests at admission, whereas fewer than 15% reported arrests at follow-up.

Number of Arrests	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
None	45.6	48.9	85.0	+36.1
1 to 3 Times	51.5	48.5	14.7	-33.8
4 or More Times	2.9	2.6	0.3	-2.3

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

Table 6. Hospitalizations Due to a Substance Abuse Related Problem

Overall, fewer clients reported substance abuse related hospitalizations at follow-up compared to admission. At follow-up, 2.7% of clients reported hospitalizations for substance abuse related problems since discharge, whereas nearly 12% of interviewed clients indicated substance abuse related hospitalizations in the six months prior to treatment admission.

Number of Hospitalizations	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
None	90.0	88.4	97.3	+8.9
1 to 3 Times	9.3	10.3	2.7	-7.6
4 or More Times	0.7	1.3	0.0	-1.3

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



Table 7. Employment Status

At follow-up, nearly 60% of clients reported that they were employed full or part-time. Among clients with completed follow-up interviews, full-time employment increased by over 18 percentage points from admission to follow-up. Clients reporting they were unemployed (looking for work in the past 30 days) decreased by 18 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.

Employment Status	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
Employed Full-Time (≥35 hrs/wk)	25.3	25.9	44.1	+18.2
Employed Part-Time (<35 hrs/wk)	13.2	15.2	15.6	+0.4
Unemployed (Looking For Work in the Past 30 Days)	46.0	40.3	22.3	-18.0
Not in Labor Force	15.5	18.6	17.9	-0.7

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

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 16 percentage points from admission to follow-up.

Months Employed	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
None	46.0	45.4	29.6	-15.8
Three Months or Less	19.2	17.9	12.9	-5.0
Four or More Months	35.0	36.8	57.5	+20.7

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

Table 9. Taxable Monthly Income

There were increases in the number of clients reporting monthly income in the three highest income categories (\$501 to \$1000, \$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. Over 40% of clients indicated their taxable monthly income at follow-up was over \$1000. There was a decrease (8.7 percentage points) in clients who indicated they had no taxable monthly income from admission to follow-up.

Taxable Monthly Income	OMS Sample at Admission N=856* (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=311* (weighted percent)		
		Admission	Follow-Up	Change
None	50.8	49.7	41.0	-8.7
\$500 or Less	12.7	13.2	4.3	-8.9
\$501 to \$1000	11.5	9.8	13.4	+3.6
\$1001 to \$2000	21.2	23.0	26.5	+3.5
Over \$2000	3.8	4.4	14.9	+10.5

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

*Data for 18 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 21 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 over 12 percentage points. Clients responding to the “none” category decreased by 16.4 percentage points from admission to follow-up.

Primary Source of Support	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
None	25.7	19.8	3.4	-16.4
Wages/Salary	40.6	42.5	54.7	+12.2
Family/ Friends	21.3	23.5	24.3	+0.8
Public Assistance	3.3	2.6	6.9	+4.3
Retirement/ Pension	0.4	0.2	0.0	-0.2
Disability	1.9	2.2	3.4	+1.2
SSI or SSDI	1.4	1.7	2.3	+0.6
Other	6.5	7.6	5.1	-2.5

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



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

Among clients completing follow-up interviews, 9.5% reported missing days of work or school due to a substance abuse issue in the six months prior to treatment admission. In the six month post-discharge period, few clients (3.3%) reported missing any days of work or school due to a substance abuse issue.

Days Missed	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
Zero Days	90.3	90.0	73.5	-16.5
1 to 5 Days	4.6	4.3	1.2	-3.1
6 or More Days	4.9	5.2	2.1	-3.1
Not Applicable*	0.2	0.5	23.2	+22.7

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 approximately half of the clients reporting this relationship status at admission and 44.3% reporting single at follow-up. “Divorced” was the second most common response at both admission and follow-up.

Relationship Status	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
Single	51.9	49.6	44.3	-5.3
Married	13.2	15.5	17.9	+2.4
Cohabiting	8.5	10.2	12.9	+2.7
Separated	7.1	5.8	3.6	-2.2
Divorced	18.4	17.7	20.2	+2.5
Widowed	0.9	1.2	1.2	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 one fifth of clients reporting this. Among clients with completed interviews, living alone was the second most common living arrangement at admission and follow-up, followed by living with other adults.

Living Arrangements	OMS Sample at Admission N=874 (weighted percent)	OMS Sample with Completed Follow-Up Interviews N=332 (weighted percent)		
		Admission	Follow-Up	Change
Alone	15.2	14.8	21.0	+6.2
Parents	23.1	22.3	21.7	-0.6
Significant Other Only	12.4	16.0	13.9	-2.1
Significant Other and Child(ren)	14.3	13.1	15.1	+2.0
Child(ren) Only	2.5	2.2	4.6	+2.4
Other Adults	18.9	20.7	17.1	-3.6
Other Adults and Child(ren)	1.7	1.6	2.9	+1.3
Jail, Correctional Facility, Juvenile Detention	2.6	2.0	0.0	-2.0
Child/Adolescent Foster Care	0.0	0.0	0.0	0.0
Halfway House, Group Home, Transitional Housing*	6.3	5.3	2.1	-3.2
Shelter, Homeless	3.1	2.0	1.6	-0.4
Hospital	0.0	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 36.7% reported an education level beyond high school. Only 14.7% of adults reported that they did not graduate high school. Nearly 70% of adolescents and 15.5% 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=332 (weighted percent)	
	Adults N=328 (weighted percent)	Adolescents N=4 (weighted percent)
Did Not Graduate High School	14.7	74.9
High School Only *	48.5	25.1
1 to 3 Years Post-Secondary Education	28.0	0.0
4 or More Years Post-Secondary Education	8.7	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 other amphetamines as a primary substance, compared to 163 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, 61.8% were abstinent at follow-up. Additionally, 51.6% of the clients who indicated marijuana as their primary substance at admission abstained during the follow-up period and 51% of clients who indicated alcohol as their primary substance at admission were abstinent during the follow-up period. There are no statistically significant associations between primary substance at admission and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

Primary Substance at Admission	OMS Sample Abstinence at Follow-Up weighted percent (N=332)
Alcohol	51.0 (83/163)
Cocaine/Crack	51.0 (5/9)
Marijuana/Hashish	51.6 (37/71)
Methamphetamine	61.8 (37/61)
Heroin	74.8 (5/7)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	61.6 (7/11)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/1)
Other Amphetamine	100.0 (1/1)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/2)
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 (4/4)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)
No Primary Substance Reported	100.0 (2/2)

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.

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 332 clients who completed a follow-up interview, 181 were abstinent and 151 were not abstinent (numbers are approximate due to weighting of data).

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 statistically significant associations between abstinence and employment at follow-up (Cochran-Mantel-Haenszel Correlation Test, $p < 0.05$). Over 50% of clients who indicated abstinence at follow-up were employed full-time at follow-up compared to just over 35% of non-abstinent clients reporting full-time employment. Over one quarter of the unemployed clients were not abstinent compared to 18% of abstinent clients.

Employment Status*	OMS Sample at Follow-Up N=332	
	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)
Employed Full-Time (≥ 35 hrs/wk)	51.6 (93)	35.2 (53)
Employed Part-Time (< 35 hrs/wk)	13.8 (25)	17.9 (27)
Unemployed (looking for work in the past 30 days)	18.0 (33)	27.5 (42)
Not in Labor Force	16.6 (30)	19.4 (29)

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, $p < 0.05$).



Table 17. Change in Employment Status from Admission to Follow-Up by Abstinence 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 are statistically significant associations between abstinence and change in employment status at follow-up (Chi Square Test, $p < 0.001$).

Change in Employment Status*	OMS Sample at Follow-Up N=332	
	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)
Increased Employment	40.6 (73)	34.8 (53)
Maintained Full-Time Employment	21.7 (39)	14.1 (21)
Maintained Part-Time Employment	1.4 (3)	9.0 (14)
Remained Unemployed	8.9 (16)	16.5 (25)
Remained Not in the Labor Force	5.9 (11)	11.3 (16)
Decreased Employment	21.5 (39)	14.3 (22)

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 (Chi Square Test, $p < 0.001$).

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 non-abstinent clients was living with parents with over one quarter of the non-abstinent clients reporting this at follow-up. The most common living arrangement for abstinent clients was living alone, followed by living with a significant other or other adults. There are significant associations between abstinence and living arrangements at follow-up (Likelihood Ratio Chi-Square Test, $p < 0.05$).

Living Arrangements*	OMS Sample at Follow-Up N=332	
	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)
Alone	19.0 (34)	23.4 (35)
Parents	17.0 (31)	27.4 (41)
Significant Other Only	18.1 (33)	8.8 (13)
Significant Other and Child(ren)	17.3 (31)	12.5 (19)
Child(ren) Only	4.7 (8)	4.4 (7)
Other Adults	18.0 (33)	16.0 (24)
Other Adults and Child(ren)	3.4 (6)	2.3 (4)
Jail/Correctional Facility	0.0 (0)	0.0 (0)
Homeless, Shelter	0.9 (2)	2.5 (4)
Halfway House, Group Home, Transitional Housing**	1.5 (3)	2.9 (4)
Hospital	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 (Likelihood Ratio Chi-Square Test, $p < 0.05$).

**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. There are statistically significant associations between abstinence and monthly income at follow-up (Jonckheere-Terpstra Test, $p < 0.001$). Nearly half of non-abstinent clients reported no monthly income at follow-up compared with just over one-third of the abstinent clients reporting no income. Over half (52.3%) of the abstinent clients indicated monthly income in the two highest income categories (\$1001 to \$2000 and over \$2000), compared with just over one quarter (27.8%) of the non-abstinent clients reporting this income category.

Monthly Income*	OMS Sample at Follow-Up N=311**	
	Abstinent weighted percent (N=173)	Non-Abstinent weighted percent (N=138)
None	34.2 (59)	49.5 (69)
\$500 or less	4.7 (8)	3.8 (6)
\$501 to \$1000	8.9 (16)	18.9 (26)
\$1001 to \$2000	34.9 (60)	16.0 (22)
Over \$2000	17.4 (30)	11.8 (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%.

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

**Data from 21 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=311*	
	Abstinent weighted percent (N=173)	Non-Abstinent weighted percent (N=138)
Increased Monthly Income	46.4 (80)	31.9 (44)
Maintained Over \$2000	2.9 (5)	4.0 (5)
Maintained \$1001 to \$2000	11.9 (21)	7.1 (10)
Maintained \$501 to \$1000	1.6 (3)	2.8 (4)
Maintained \$500 or Less	0.8 (1)	1.4 (2)
Maintained No Income	22.4 (39)	31.2 (43)
Decreased Monthly Income	14.1 (24)	21.6 (30)

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 21 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 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=332			
	Primary Income Source at Admission		Primary Income Source at Follow-Up	
	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)
None	21.2 (39)	18.1 (27)	1.9 (3)	5.1 (8)
Wages/ Salary	45.5 (82)	38.9 (59)	59.5 (108)	48.9 (74)
Family/ Friends	20.7 (37)	26.8 (40)	23.4 (42)	25.5 (38)
Public Assistance	2.4 (4)	2.8 (4)	6.6 (12)	7.2 (11)
Retirement/ Pension	0.0 (0)	0.4 (1)	0.0 (0)	0.0 (0)
Disability	2.6 (5)	1.7 (3)	2.6 (5)	4.4 (7)
SSI and SSDI	2.5 (5)	0.8 (1)	2.9 (5)	1.5 (2)
Other	5.1 (9)	10.6 (16)	3.2 (6)	7.4 (11)

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

There are statistically significant differences between abstinence and arrest categories at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.01$). The percentage of abstinent clients who reported no arrests during the follow-up period (91.6%) was higher than the percentage of non-abstinent clients who reported no arrests (77.2%). The percentage of non-abstinent clients who reported one or more arrests at follow-up (22.8%) was nearly three times higher than that of the abstinent clients (8.4%) reporting the same arrest frequency.

Arrests*	OMS Sample at Follow-Up N=332	
	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)
None	91.6 (166)	77.2 (116)
1 to 3 Times	8.4 (15)	22.2 (34)
4 or More Times	0.0 (0)	0.6 (1)

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, $p < 0.01$).

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

Of the 332 clients who completed a follow-up interview, 40.2% 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=332	
	Abstinent weighted percent (N=181)	Non-Abstinent weighted percent (N=151)
None	53.7 (97)	67.2 (102)
1 or More Meetings	46.3 (84)	32.8 (49)

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, 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 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. As previously noted, it is important to note in Tables 24 and 25 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, only one person who completed the follow-up interview reported other amphetamines as a primary substance, compared to 163 people who reported alcohol.



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

Of the clients who reported methamphetamine as the primary substance at admission, 88.7% were arrest-free at follow-up. Additionally, 87.5% of clients indicating alcohol as the primary substance at admission and 78.8% of clients reporting marijuana as the primary substance at admission were arrest-free. There are no statistically significant associations 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 weighted percent (N=332)
Alcohol	87.5 (143/163)
Cocaine/Crack	62.3 (6/9)
Marijuana/Hashish	78.8 (56/71)
Methamphetamine	88.7 (54/61)
Heroin	76.5 (5/7)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	87.2 (10/11)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/1)
Other Amphetamine	100.0 (1/1)
Other Stimulants	0.0 (0/0)
Benzodiazepines	100.0 (2/2)
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 (4/4)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)
No Primary Substance Reported	100.0 (2/2)

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.

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 N for each response represents 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, 62.9% of clients reporting marijuana as the primary substance at admission were employed. In addition, 61.6% of clients indicating alcohol and 51.6% of clients reporting methamphetamine were employed at follow-up. There are no significant differences 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 weighted percent (N=332)
Alcohol	61.6 (100/163)
Cocaine/Crack	60.9 (5/9)
Marijuana/Hashish	62.9 (45/71)
Methamphetamine	51.6 (31/61)
Heroin	56.3 (4/7)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	54.7 (6/11)
PCP	0.0 (0/0)
Other Hallucinogens	100.0 (1/1)
Other Amphetamine	100.0 (1/1)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/2)
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	75.9 (3/4)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/0)
No Primary Substance Reported	0.7 (1/2)

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.

*In some cases, the number of clients is rounded down to zero, however there is an actual weighted percent.



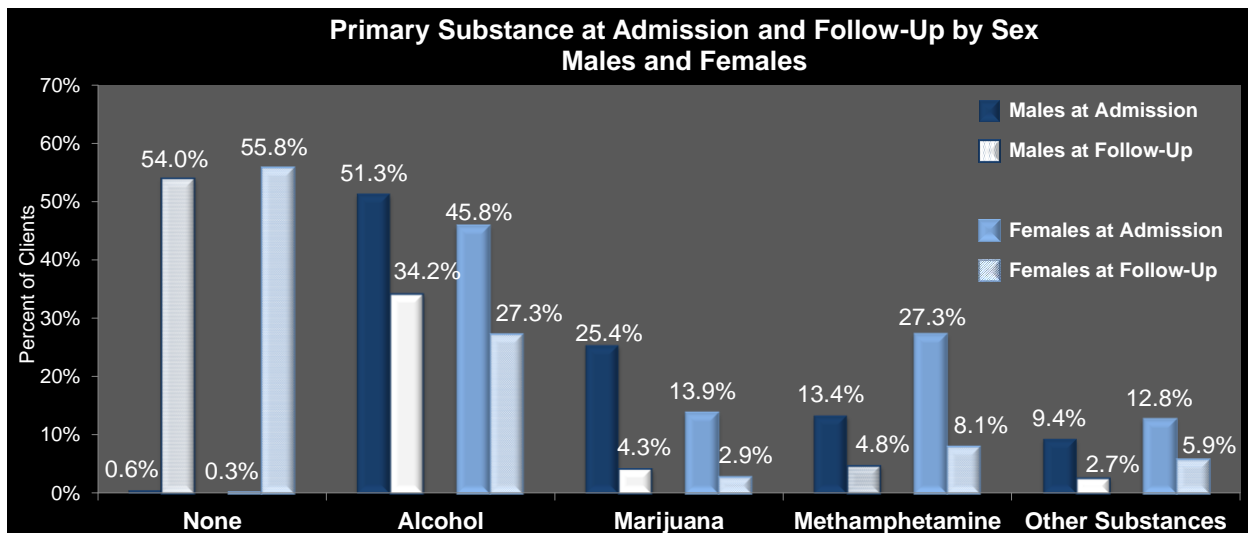
OUTCOMES: SEX

Figures 4 and 5 present selected variables at admission and follow-up presented by sex. Of the 332 clients who completed the follow-up interview, 212 were males (63.9%) and 118 were females (35.5%); sex was reported as “unknown” at admission by 0.6% of clients completing follow-up interviews. 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. Data comparing primary substance by age for adults (18 and older) and adolescents (17 and younger) are not included in this report due to the low number of adolescents completing the follow-up interview (four clients).

The three primary substances clients reported most often were alcohol, marijuana, and methamphetamine (see Table 1 on page 7). Figure 4 shows the percentage of males and females related to these three substances; the following primary substances are grouped together in the “other substances” category: cocaine/crack, heroin, other opiates and synthetics, other hallucinogens, other amphetamines, benzodiazepines, oxycontin and substances categorized in the other category.

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

At follow-up, 54% of males and 55.8% of females 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.

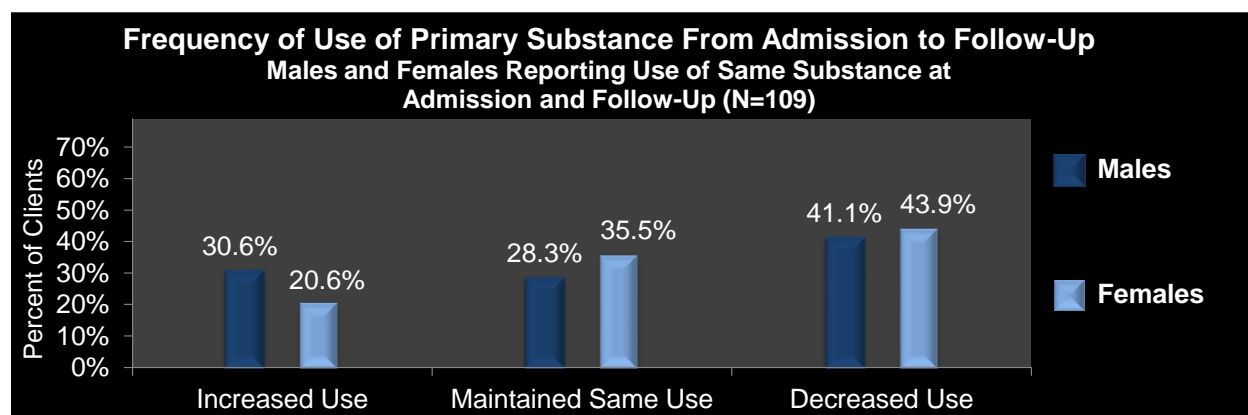


Note: Due to rounding, percentages may not add up to exactly 100%.

Figure 5 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 (109 clients). Figure 5 presents the change in frequency of use from admission to follow-up for this subgroup of males and females. It is important to note that of the 109 individuals, 72 clients (66.1%) were male and 37 clients (33.9%) 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 (30.6% and 20.6% respectively). More females (35.5%) reported the same frequency of use at both admission and follow-up compared to males (28.3%). Similar percentages of males and females (41.1% and 43.9% 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 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, 18 of the 31 clients (weighted percent = 56.9%) 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 7-30 days and 61-90 days, with 68 clients (20.5%) in each of these categories. The next most common was more than 120 days with 64 clients (19.3%).

There were statistically significant associations between length of stay and abstinence (Jonckheere-Terpstra Test, $p < 0.001$), length of stay and arrests (Jonckheere-Terpstra Test, $p < 0.001$), as well as length of stay and employment at follow up (Jonckheere-Terpstra Test, $p < 0.05$). Over 76% of clients who completed the follow-up interview who received treatment for more than 120 days reported abstinence since treatment discharge, 94.8% had not been arrested since discharge, and over half (58.6%) were employed full or part-time.

OMS Sample at Follow-Up N=332				
Length Of Stay	N	Abstinent* weighted percent (N)	No Arrests* weighted percent (N)	Employed** weighted percent (N)
Less Than 7 Days	31	56.9 (18)	65.2 (20)	40.1 (12)
7 - 30 Days	68	35.6 (24)	80.0 (54)	50.7 (35)
31 - 60 Days	49	52.8 (26)	87.1 (42)	58.3 (28)
61 - 90 Days	68	52.9 (36)	84.4 (58)	76.8 (53)
91 - 120 Days	52	54.4 (28)	90.1 (47)	63.6 (33)
More Than 120 Days	64	76.2 (49)	94.8 (61)	58.6 (37)

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 (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 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, 115 of the 199 clients (weighted percent = 57.6%) 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 that clients who were successfully discharged comprise the majority of the clients interviewed: 59.9% of the clients in Table 27.



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

The 332 clients who completed a follow-up interview are represented in Table 27. One hundred ninety-nine clients (59.9%) were discharged as successful cases and 133 clients (40.1%) did not successfully complete the treatment program. Of the 133 clients who did not complete treatment, 103 were terminated and 30 were neutral discharges. Of the 199 clients who completed follow-up interviews and were successfully discharged: 57.6% were abstinent, 91% had not been arrested; and 65% were working full or part-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 employment at follow-up (Cochran-Mantel-Haenszel Test, $p < 0.05$). There are no significant associations between discharge status and abstinence at follow-up (Cochran-Mantel-Haenszel Test, $p > 0.05$).

OMS Sample at Follow-Up N=332				
Discharge Status	N	Abstinent weighted percent (N)	No Arrests* weighted percent (N)	Employed* weighted percent (N)
Successful Completion	199	57.6 (115)	91.0 (181)	65.0 (129)
Terminated	103	47.7 (49)	79.0 (81)	56.2 (58)
Neutral Discharge	30	56.7 (17)	66.3 (20)	37.1 (11)
Total	332	54.4 (181)	85.0 (282)	59.8 (198)

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, $p < 0.01$).

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 2012 OMS sample. As of September 4, 2012, of the 874 clients in the OMS sample, discharge information had been received for 830 clients and 44 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 stays of 85 days. Clients who indicated alcohol as the primary substance at admission had a median length of stay of 71 days. Clients whose primary substance at admission was methamphetamine had a median length of stay of 70 days.

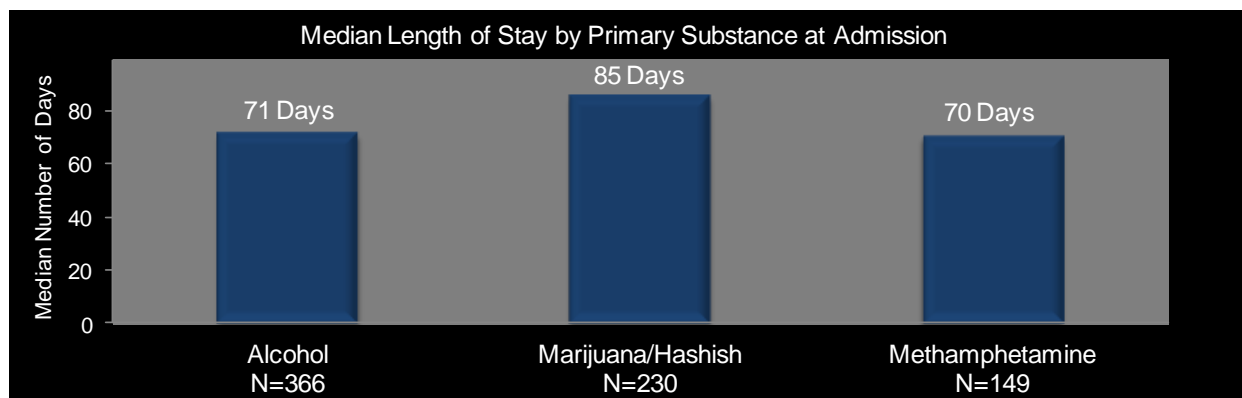


Table 28. Length of Stay by Primary Substance at Admission

There are no statistically significant trends between length of stay and primary substance reported at admission (Jonckheere-Terpstra Test, $p > 0.05$). The length of stay category with the largest percentage of clients reporting marijuana and methamphetamine as the primary substances at admission was more than 120 days and the category with the largest percentage of clients indicating alcohol was the 61 to 90 days category.

Length of Stay							
Primary Substance at Admission	N	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	366	6.2	19.0	13.6	23.3	16.0	22.0
Marijuana/Hashish	230	9.2	11.3	19.7	14.2	20.3	25.3
Methamphetamine	149	11.8	21.0	13.6	12.9	17.2	23.7

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

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 follow-up interviews completed with clients at six months post discharge indicate that 84.8% of the clients feel that the substance abuse treatment they received was either very beneficial or beneficial overall. "Very beneficial" was the response indicated most often for individual 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=332					
Perceived Benefit of Counseling	Individual Counseling % (N=331)*	Family Counseling % (N=332)	Group Counseling % (N=332)	Educational Counseling % (N=330)*	Overall Rating of Treatment Program % (N=330)*
Very Beneficial	45.6 (151)	4.5 (15)	36.5 (121)	31.2 (103)	51.5 (170)
Beneficial	36.0 (119)	3.6 (12)	35.2 (117)	37.6 (124)	33.3 (110)
Not Beneficial	12.7 (42)	1.2 (4)	15.7 (52)	10.9 (36)	15.2 (50)
Did Not Receive	5.7 (19)	90.7 (301)	12.7 (42)	20.3 (67)	Not Applicable

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

*Data are excluded for one client's opinion of individual counseling and two client's opinion of educational counseling and overall rating of treatment program due to client responses of "don't know".



APPENDIX: PRESENTATION OF TRACKING DATA

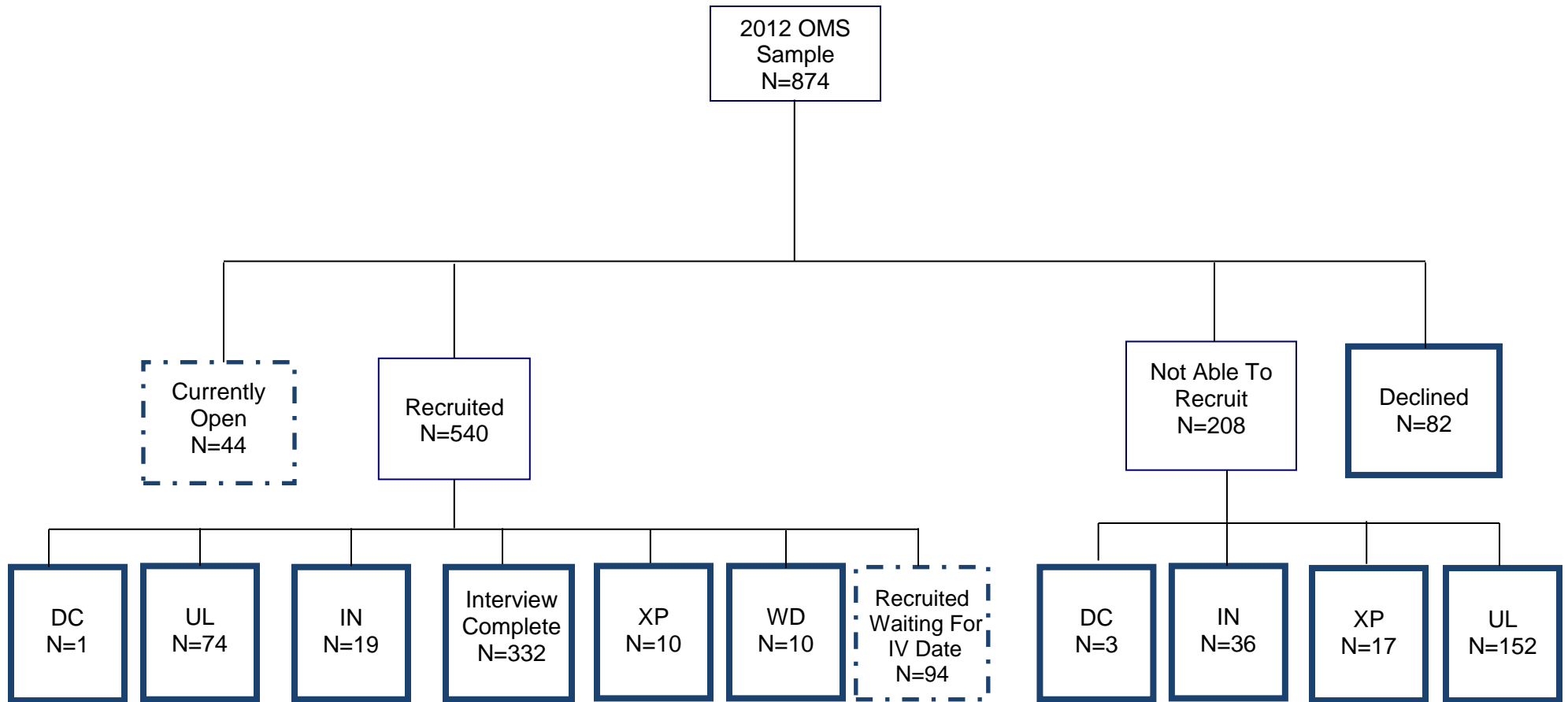
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Table A1. Client Classifications

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 are 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 have 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 were 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 2012 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: 2012 OMS Sample

Table A2. Case Status – All Clients

Status	Number of Clients
Open Cases	736
Closed Cases	138
Total	874

Table A3. Closed Clients by Category

Category	Number of Clients	Percentage of Clients
Follow-Up Interview Complete	332	45.1
Unable to Locate	226	30.7
Declined or Withdrew Participation	92	12.5
Incarcerated	55	7.5
Expired*	27	3.7
Deceased	4	0.5
Total	736	100.0

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

Table A4. Recruitment and Follow-Up Rates

Category	Percentage
Recruitment	69.8 (540/774)
Follow-Up	79.8 (332/416)



Client Contacts: 2012 OMS Sample

Table A5. Type and Number of Client Contacts through September 3, 2013

Type of Contact	Adolescents N=22	Adults N=852	Total N=874
An outgoing phone call attempting to recruit client.	223	9,127	9,350
An outgoing phone call in which recruitment has actually taken place and the client has agreed to participate.	12	411	423
An incoming phone call in which recruitment has actually taken place and the client agreed to participate.	1	116	117
An outgoing phone call attempting to update/check-in with client.	54	3,883	3,937
An incoming or outgoing phone call in which a successful update occurs with client.	16	911	927
An incoming phone call from client or collateral contact (not from treatment agency).	8	394	402
An outgoing phone call attempting to reach client for the six month follow-up interview.	99	3,137	3,236
An outgoing phone call completing the six month follow-up interview.	8	268	276
An incoming phone call in which the six month follow-up interview is completed.	0	56	56
An outgoing phone call attempting to track client through collateral contacts.	3	11	14
Any incoming and outgoing attempts (phone call/letter/fax/email) to track client through their substance abuse treatment agency.	13	368	381
Other - usually an internet search, but includes any call/contact that doesn't fall under any other category.	127	5,399	5,526
A letter sent to contact client; includes letters that have been returned and notification of address changes from post office; outgoing or incoming.	148	6,592	6,740
All Client Contacts	712	30,673	31,385



Table A6. Contacts for Clients with Closed Cases*

Status	Clients	All Contacts	Contacts (Mean)	Number of Letters Mailed
Interviews Completed	332	9,326	28.1	2,061
Unable to Locate	226	12,377	54.8	2,653
Declined	82	816	10.0	183
Incarcerated	55	1,960	35.6	390
Expired	27	1,041	38.6	206
Withdrew	10	266	26.6	59
Deceased	4	148	37.0	47
Grand Total	736	25,934	35.2	5,599

* Information in Table A6 represents only closed cases. Cases are closed for 736 of the 874 clients (84.2%) in this report.

