

STATE OF IOWA OUTCOMES MONITORING SYSTEM

YEAR TEN REPORT

PREPARED BY:

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Executive Summary

The Outcomes Monitoring System (OMS) was established to systematically gather data on substance abuse treatment outcomes in Iowa. Randomly selected clients from 24 agencies, funded by the Iowa Department of Public Health (IDPH), are contacted for follow-up interviews that occur approximately six months after discharge from treatment. Nine hundred and sixty-five clients admitted in calendar year 2007 were selected to participate in the OMS project. This report presents outcomes for 389 of these clients who completed the follow-up interview.

Overview of Findings

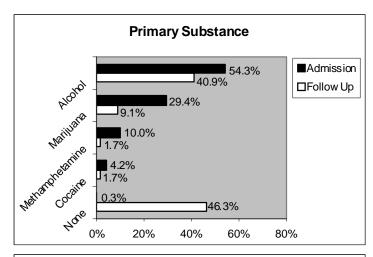
At follow-up, abstinence increased by 46%; no arrests increased by 48.2%; and full time employment increased by 8.2%.

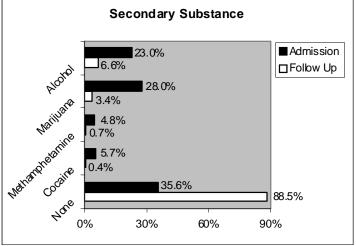
Outcomes at Follow Up N=389				
Abstinence No Arrests Employed Full Time Percent (N) Percent (N) Percent (N)				
Admission	0.3 (1)	36.1 (141)	33.0 (128)	
Follow Up	46.3 (180)	84.3 (328)	41.2 (160)	

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.

Primary and Secondary Substance

- At both admission and follow up, alcohol was the most commonly used primary substance with 54.3% and 40.9% of clients reporting it, respectively.
- Alcohol and marijuana were the two most often reported substances for both primary and secondary substance at admission and follow up.
- Marijuana was the most common secondary substance reported at admission by 28% of clients. At follow up, nearly 25% fewer clients reported marijuana as a secondary substance than at admission.





Primary Substance and Outcome Variables

Primary substance use was examined in relation to the outcome variables of abstinence, arrests, and employment. 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.

Abstinence

- Of the 389 clients interviewed, 46.3% indicated abstinence six months post discharge. The most frequently used primary substance at admission was alcohol. Clients who indicated alcohol as their primary substance had a 45.7% rate of abstinence during the follow-up period. Additionally, 43.9% of clients who indicated marijuana were abstinent; 49.7% of clients who indicated methamphetamine were abstinent; and 60.6% of clients who indicated cocaine as their primary substance were abstinent.
- Overall, nearly 70% of clients reported either "no use in the past six months" or "no past month use" at follow up.

Arrests

 Clients who indicated alcohol as their primary substance at admission had a higher no arrest rate (86.5%) at follow up than clients reporting marijuana, methamphetamine, or cocaine. Of those clients, over 75% were arrest free at follow up.

Employment

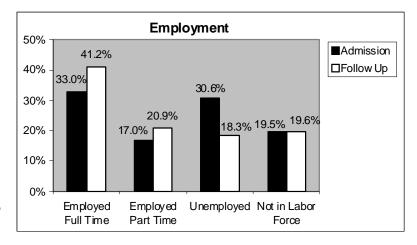
• Of the clients who reported alcohol as their primary substance at admission, 47.4% were working full time at follow up. Of those reporting methamphetamine, 37.8% were employed full time; 32.2% who indicated marijuana were employed full time at follow up; and 26.4% who indicated cocaine were working full time at follow up.

The following table shows the top four primary substances reported at admission by three outcome variables of abstinence, no arrests, and employment.

Primary Substance	OMS Sample at Follow Up N=389			
at Admission	Abstinence Percent (N)	No Arrests Percent (N)	Employed Full Time Percent (N)	
Alcohol	45.7 (97/211)	86.5 (183/211)	47.4 (100/211)	
Marijuana	43.9 (50/114)	82.8 (95/114)	32.2 (37/114)	
Methamphetamine	49.7 (19/39)	75.3 (29/39)	37.8 (15/39)	
Cocaine/Crack	60.6 (10/16)	79.7 (13/16)	26.4 (4/16)	

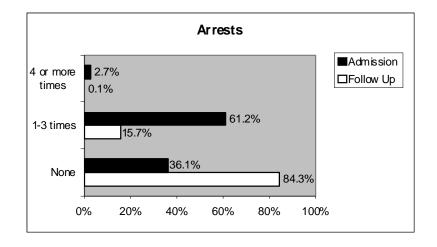
Employment Status

- The percent of clients employed full time increased from 33% at admission to 41.2% at follow up.
- The percent of clients who indicated that they were unemployed but looking for work dropped from 30.6% at admission to 18.3% at follow up.



Arrests

 From admission to follow up, there were 2.3 times as many clients who reported having no arrests.



Length of Stay

Of the 965 clients selected to participate in the OMS project, 860 were issued a discharge date during the reporting period. The following chart presents length of stay in treatment for those 860 clients.

percentage of clients had a length of stay of 31 to 60 days; the lowest percentage of clients had a length of stay of 91 to 120 days. The mean length of stay was 75 days in treatment (median = 54), with a range of 0 days to 501 days.

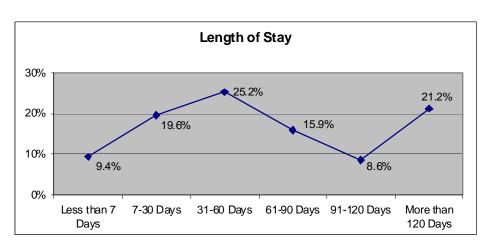


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Section A. Background

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 related client outcomes in Iowa. Prior to this, treatment agency staff conducted their own follow-up interviews with clients. Implementation of the OMS project provided an independent evaluation regarding client outcomes and relieved the treatment agencies from the responsibility of tracking and interviewing clients following discharge. The Consortium has provided ongoing OMS client sampling, recruitment, tracking, follow up services, data analysis, and reporting since January 1999.

Section B. Evaluation Process and Methods

B.1. Data Collection Tools

The Consortium utilizes two standardized client data collection systems for OMS: the Substance Abuse Reporting System (SARS) and the Iowa Service Management and Reporting Tool (I-SMART). Since 1982, IDPH has collected client data using SARS. In 2005, IDPH implemented I-SMART, a web-based system used to manage client treatment episode data. Data are collected that relate to follow up and various aspects of treatment including crisis, placement screening, admission, discharge, and services received. OMS follow-up data collection is designed to integrate with the client data recorded in SARS and I-SMART. While the primary focus of OMS is the acquisition of follow-up data, the success of the project's design is dependent upon complete and accurate treatment admission and discharge data. SARS/I-SMART admission data and follow-up data collected by Consortium staff are client self-report data.

B.2. Sampling Procedures

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, halfway house, or continuing care. The monthly data set from which the sample is drawn is comprised of the previous month's SARS/I-SMART admission data. Given that the number of admissions varies from month to month, the sample size also varies. The average monthly sample size during calendar year 2007 was 86 with a range of 53 to 147 clients. The monthly random sample size was approximately 8% of the adult and adolescent client population admitted to treatment in that month.

B.3. Recruitment

Agencies participating in OMS play an important role in informing clients about the project. At admission to treatment, clients are provided with materials that include a letter from IDPH describing in detail the project and the possibility of being selected for a follow-up interview. Immediately after the monthly OMS sample is selected, Consortium staff members contact clients in an effort to secure a verbal agreement to participate in a 10 to 15 minute follow-up telephone interview that takes place approximately six months after discharge from treatment. When 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 for the Consortium utilized to assist in protecting client confidentiality.

Additional procedures are followed so that phone calls and mail from the Health Research Network may in no way be connected to substance use concerns. Staff members confirm the identity of the client before describing the project in detail and attempting to recruit the client. 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 will read the "Information Summary and Consent Document" that describes the OMS project and invite the client to participate in a follow-up interview.

If a client agrees to participate, their individual contact information is recorded. Participants are informed that they will receive periodic contact information update calls or letters, approximately every six to eight weeks until the follow-up interview. Staff also collect collateral contact information, such as a relative's phone number, during the initial and update calls. Participants are informed that staff members who contact them will identify themselves as being with the Health Research Network, calling about a public health study.

The Consortium provides a toll-free number to clients along with information regarding the confidential voice mail system. Clients without phone contact information and/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 refuse or withdraw participation in OMS at any time including the recruitment, update, and interview phases. There are no penalties for withdrawing participation in the study. Once a client refuses participation, the case is officially closed and tracking of that individual ceases unless the client later contacts the HRN and indicates a desire to participate. Clients receive a twenty-dollar gift card upon completion of the follow-up interview.

B.4. Tracking

A web-based password protected tracking system was developed by the Consortium to manage client data. Client tracking information is recorded in real time and entered into a database that contains detailed case status information for each client. Client tracking information is maintained for each client until his or her case is closed. This tracking information consists of the successful contacts 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 35 through 39.

B.5. Follow-Up Interview

Four important elements must be present before a client's follow-up interview can occur. Staff must: 1) be in contact with the client via the telephone; 2) document the client's verbal consent to participate in the follow-up interview; 3) have a discharge date from treatment confirmed by IDPH records; and 4) have documented that six months have passed since the client's discharge date.

The discharge date is critical as it sets the time period for when the follow-up interview is scheduled to take place. Follow-up interviews are conducted six months after the client has been discharged from treatment. Without an official discharge date, it is impossible for staff to determine when an interview should take place. Once staff receives a SARS or I-SMART discharge date, the client is contacted for their follow-up interview. It is not always possible to obtain the follow-up interview exactly six months post discharge, therefore, the project design

allows staff to interview recruited participants anywhere from two weeks prior to eight weeks following the six-month post discharge date.

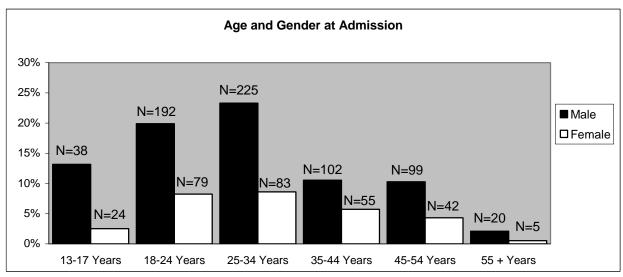
Section C. Clients

C.1. Description of Clients at Admission

This report describes the group of randomly selected clients with treatment admission dates from January 1, 2007 through December 31, 2007. The number of clients is rounded to the nearest integer due to the weighting of the data, therefore the numbers of clients are approximate, but the percentages are accurate. During this twelve-month period, 965 clients were selected to participate in the OMS project. Of those 965 clients, 62 (6.5%) were adolescents (age 17 and younger) and 903 (93.5%) were adults. Six hundred and seventy-six (70%) were male and 289 (30%) were female. Clients ranged from 13 to 68 years of age with a median age of 31.3 years.

Chart 1 presents the number of males and females in six age categories. The highest number of males and females at admission were between the ages of 25 and 34 years of age. There were four times as many males age 55 and older at admission than females, and one and a half times as many males between the ages of 13 and 17 years as there were females.

Chart 1. Age and Gender at Admission



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

Chart 2 presents race reported at admission for the 965 clients in the OMS sample. 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. There were two clients who reported Alaskan Native, two clients who reported Alaskan Native/American Indian, four clients who reported African American/White, nine clients who reported Asian, and one client who reported Hawaiian or Pacific Islander as their primary race at admission. Additionally, there were 15 clients who reported American Indian; 93 clients who reported African American/Black; and 839 clients who reported Caucasian/White as their primary race at admission.

Chart 2. Race at Admission

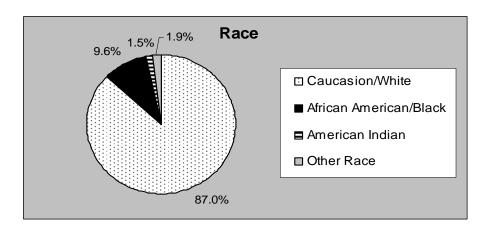
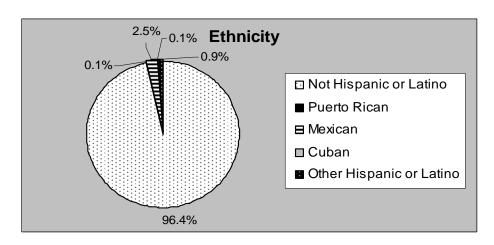


Chart 3 shows ethnicity reported at admission for the 965 clients. A small number (34 individuals or 3.5%) reported being of Spanish, Hispanic, Latino, or Mexican ethnicity at admission.

Chart 3. Ethnicity at Admission



C.2. Recruitment, Tracking and Follow-Up Efforts

Of the 965 clients who were selected to participate in the OMS Project, 610 individuals consented to participate in the follow-up interview. To date, 389 of these follow-up interviews have been completed. An additional 115 individuals, who have been recruited and are not yet due for their interview, are receiving regular update calls as their interview date nears. Of the OMS clients admitted during the 2007 calendar year, 72 declined to participate in the project.

The total number of clients currently classified as "not able to recruit" is 199. Of this number, 37 individuals are incarcerated. Staff does not recruit or interview individuals who are incarcerated; however, a number of clients (24) became incarcerated after being successfully recruited into the follow-up study. There were 103 unrecruited individuals who could not be located, even after numerous phone calls, letters, and internet searches. Likewise, 65 clients who were successfully recruited could not be located when their interview date arrived. Interview due dates already had passed for 59 unrecruited and 7 recruited clients when the Consortium received notification of their discharge dates. Two clients died and eight clients chose to withdraw from the project after previously agreeing to participate.

Of the 965 clients selected to participate, 46 clients (4.8%) were not informed of the OMS follow-up project by the treatment agency and therefore could not be interviewed by Consortium staff. Clients from this agency who had an interview date that occurred within the time period of this report were closed out as "expired". (Refer to Table A1. of the Appendix for information on client statuses). This was the case for 39 clients. The other seven clients had not received discharge dates and were classified as "not able to recruit". It is important to note that this affected some of the rates and percentages in this report. Clients from this agency are now being informed of the project at admission and may be contacted by the Consortium.

The recruitment rate consists of clients who were successfully recruited (610), those who refused (72), and unrecruited clients whom staff has been unable to locate (103). This calculation results in a recruitment rate of 77.7%. Of the clients eligible for a follow-up interview (successfully recruited who are not incarcerated, and with an interview due date that has arrived), 84.2% received an interview. This calculation includes all clients who completed the follow-up interview (389), recruited clients who could not be located when their interview was due (65), and those who decided not to take part in the interview after initially agreeing to do so (8). Detailed tracking information regarding the status of the entire OMS sample is displayed in the Appendix on pages 35 through 39.

Section D. Changes from Admission to Follow Up

The tables in this section reflect changes based on a comparison of the SARS/I-SMART admission data and the OMS follow-up interview data collected approximately six months after discharge. On average, the follow-up interviews occurred eight and a half months following admission. Variables at admission and follow up are compared only for those clients who had a response at *both* admission and follow up. It is important to exercise caution when ascribing reasons for changes from admission to follow up to particular causes as many factors affect client outcomes. Fourteen variables were identified for comparison from the SARS/I-SMART admission and follow-up data; these are presented in Tables 1 through 14 on pages 8 through 16. Some of the more interesting findings are reported below.

- **Abstinence:** Clients reporting "no primary substance" increased from 0.3% at admission to 46.3% at follow up. Thus, at follow up, nearly half of the clients were abstinent during the six months after treatment.
- **Primary Substance**: For clients who indicated use of a primary substance, alcohol was the most common with 54.3% reporting use at admission and 40.9% of clients reporting use at follow up.
- **Secondary Substance**: Clients reporting "no secondary substance" increased from 35.6% to 88.5%, therefore, only 11.5% of clients reported using more than one substance at follow up. For clients who indicated use of a secondary substance, alcohol was the most common, followed by marijuana. The frequency of use of both substances, however, decreased between admission and follow up.
- 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. Only 15.8% of the clients had been arrested during the six months following treatment. Of those who were arrested, nearly all were arrested 1-3 times.
- Months Employed: Clients responding "none" when asked about months employed decreased by 14.2 percentage points while clients responding "4 or more months" increased by 15 percentage points.
- **Income**: Of the clients who reported no income at admission, over half (54.1%) reported income primarily from "wages/salary" at follow up. An additional 24.6% of the clients with no income at admission reported receiving income primarily from "family/friends" at follow up.

Tables 1 through 14 present admission responses from sampled clients admitted in 2007 (965). The tables also describe the admission and follow-up responses from clients who completed follow-up interviews (389, a subset of the sample). The first column describes the responses, or categories of responses, for the SARS or I-SMART question. The second column describes the responses for clients in the sample who answered that item at admission. The third and fourth columns describe the responses for clients who answered the particular item both at admission and at follow up, a group of 389 clients. The number of clients in this group is smaller because it represents only those clients who completed the follow-up interview. Additionally, the number of clients may be less than 389 for any given item as clients may decline to answer any question at follow up.

Table 15 displays education status at follow up by age at admission for the 389 clients who completed the follow-up interview. There can be no comparison between admission and follow-up data for this question because education level can be updated periodically by each agency in I-SMART, replacing the initial education level recorded at admission.

Table 1. Primary Substance

At follow up, nearly half of the clients indicated no primary substance use. The most commonly used primary substance was alcohol, with 54.3% and 40.9% reporting use at admission and follow up, respectively. Marijuana was the second most commonly used substance. There was over a 20 percentage point decrease between admission and follow up for clients reporting marijuana use. Methamphetamine use decreased from 10% of clients at admission to just under 2% of clients reporting use at follow up.

Primary Substance	OMS Sample at Admission N=965	OMS Sample at Follow Up N=389 (weighted percent)		
	(weighted percent)	Admission	Follow Up	
None	0.1	0.3	46.3	
Alcohol	49.5	54.3	40.9	
Cocaine/Crack	5.0	4.2	1.7	
Marijuana/Hashish	28.0	29.4	9.1	
Methamphetamine	15.8	10.0	1.7	
Heroin	0.1	0.0	0.0	
Non-Prescription Methadone	0.2	0.0	0.0	
Other Opiates and Synthetics	0.9	1.4	0.3	
PCP	0.0	0.0	0.0	
Other Hallucinogens	0.0	0.0	0.0	
Other Amphetamine	0.1	0.1	0.0	
Other Stimulants	0.0	0.0	0.0	
Benzodiazepines	0.1	0.0	0.0	
Other Tranquilizers	0.0	0.0	0.0	
Barbiturates	0.0	0.1	0.1	
Other Sedatives and Hypnotics	0.0	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	0.0	0.0	0.0	
Other Prescribed Analgesics	0.0	0.0	0.0	
Other	0.1	0.3	0.0	

Table 2. Secondary Substance

At follow up, 88.5% of clients responded "none" when asked if they used a secondary substance. For those clients who did report using a secondary substance at follow up, alcohol was the most common (6.6%), followed by marijuana (3.4%). There were large decreases between admission and follow up for clients reporting alcohol or marijuana as their secondary substance, 16.4 and 24.6 percentage points respectively. Additionally, there were moderate decreases between admission and follow up for clients reporting methamphetamine or cocaine as their secondary substance: 4.1 and 5.3 percentage points, respectively.

Secondary Substance	OMS Sample at Admission N=965	OMS Sample at Follow Up N=389 (weighted percent)		
	(weighted percent)	Admission	Follow Up	
None	34.3	35.6	88.5	
Alcohol	23.3	23.0	6.6	
Cocaine/Crack	5.0	5.7	0.4	
Marijuana/Hashish	28.8	28.0	3.4	
Methamphetamine	6.1	4.8	0.7	
Heroin	0.2	0.4	0.0	
Non-Prescription Methadone	0.0	0.0	0.0	
Other Opiates and Synthetics	0.6	0.4	0.0	
PCP	0.0	0.0	0.0	
Other Hallucinogens	0.3	0.0	0.0	
Other Amphetamine	0.1	0.3	0.0	
Other Stimulants	0.3	0.6	0.0	
Benzodiazepines	0.2	0.0	0.0	
Other Tranquilizers	0.0	0.0	0.0	
Barbiturates	0.0	0.0	0.0	
Other Sedatives and Hypnotics	0.3	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	0.2	0.0	0.1	
Oxycontin	0.3	0.7	0.3	
Other Prescribed Analgesics	0.0	0.0	0.0	
Other	0.1	0.0	0.1	

Changes in frequency of use provides information regarding client outcomes following treatment. Tables 3 and 4 present frequency of use for individuals 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 later at follow up report that they have used alcohol 1-3 times in the past month, representing a decrease in use (assuming similar volume). Comparison of frequency of use among substances is limited as methods of use and volume of substance varies and may not be comparable (e.g., drinking alcohol versus smoking marijuana).

Table 3. Change in Frequency of Use of Primary Substance

Table 3 is a subset (305) of the total group who completed the follow up interview (389), and presents the change in frequency of use for those who reported the same primary substance at *both* admission and follow up. At follow up, the majority (58.9%) of these clients reported abstinence (no use in the past six months). For clients who reported use of a primary substance during the six months following discharge (41.1%), "1-2 times per week" was the most common frequency (13.2%). The percentage of clients reporting "no past month use" decreased by a large margin (over 20 percentage points), likely due to these clients entering the category of "no use in past six months" at follow up. Nearly 70% of clients reported either "no use in past six months" or "no past month use", indicating an overall decrease in the use of primary substance.

Primary Substance Frequency	OMS Sample at Admission N=965	OMS Sample at Follow Up N=305 (weighted percent)		
, ,	(weighted percent)	Admission	Follow Up	Change
No use in past six months	10.6	10.2	58.9	+48.7
No past month use	35.5	33.2	10.5	-22.7
1-3 times in past month	24.0	24.6	11.1	-13.5
1-2 times per week	9.5	13.6	13.2	-0.4
3-6 times per week	7.5	6.2	2.7	-3.5
Once daily	5.0	5.3	2.7	-2.6
2-3 times daily	2.3	2.8	0.3	-2.5
4 + times daily	5.4	4.1	0.7	-3.4

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

Eighty-four clients (21.6%) reported a primary substance at follow up that was different than the primary substance they reported at admission. Forty-seven of these clients identified that their primary substance at follow up was the one they originally reported as their secondary substance at admission. For example, a client reported a primary substance of alcohol and a secondary substance of marijuana at admission but when asked at follow up, the client reported use of marijuana only. Thus, marijuana became their primary substance at follow up. The majority of clients in these cases identified marijuana or methamphetamine as their primary substance at admission but stated alcohol use was now primary (rather than secondary) at follow up. The remaining 37 clients reported using a primary substance at follow up that was neither the primary *nor* the secondary substance that they reported at admission. The majority of these clients also switched from marijuana or methamphetamine as their primary substance at admission to alcohol at follow up.

Table 4. Change in Frequency of Use of Secondary Substance

Table 4 represents only those clients who had no change in their secondary substance from admission to follow up, including those who remained abstinent (no use in the past six months), a group of 356 clients. Clients responding "no use in past six months" for use of a secondary substance increased by 42.9 percentage points from 53.8% at admission to 96.7% at follow up.

Secondary Substance Frequency	OMS Sample at Admission N=965	OMS Sample at Follow Up N=356 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change
No use in past six months	52.2	53.8	96.7	+42.9
No past month use	22.8	22.8	1.0	-21.8
1-3 times in past month	13.8	14.5	1.6	-12.9
1-2 times per week	4.1	5.3	0.7	-4.6
3-6 times per week	3.1	1.8	0.0	-1.8
Once daily	1.7	1.4	0.0	-1.4
2-3 times daily	1.1	0.2	0.0	-0.2
4 + times daily	1.3	0.0	0.0	0.0

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

Table 5. Days per Month Attended AA, NA or Similar Meetings

At follow up, participants reported attending more AA, NA, or similar meetings than at admission. Clients indicating "none" to the number of days they attended meetings decreased by 19.1 percentage points from admission to follow up. Twenty-seven percent of clients reported attending at least one meeting per month at follow up, compared to 15.1% at admission. Additionally, there was a 7.3 percentage point increase in the number of clients who reported attending 11 or more meetings per month between admission and follow up.

Meetings Attended Per Month	OMS Sample at Admission N=965	OMS Sample at Follow Up N=389 (weighted percent)			
	(weighted percent)	Admission	Follow Up	Change	
None	80.5	81.8	62.7	-19.1	
1- 10 meetings	15.7	15.1	27.0	+11.9	
11 + meetings	3.8	3.1	10.4	+7.3	

Table 6. 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. Over 84% of clients reported no arrests at follow up, compared to 36.1% of clients reporting no arrests at admission. Over 60% of clients reported being arrested 1-3 times at admission, whereas only 15.7% reported 1-3 arrests at follow up.

Arrests	OMS Sample at Admission N=965 (weighted percent)	OMS Sample at Follow Up N=389 (weighted percent)		
		Admission	Follow Up	Change
None	37.8	36.1	84.3	+48.2
1-3 times	58.9	61.2	15.7	-45.5
4 times or more	3.4	2.7	0.1	-2.6

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

Table 7. Hospitalizations

At follow up, over 98% of clients reported no hospitalizations for a substance related problem.

Hospitalizations	OMS Sample at Admission N=965 (weighted percent)	OMS Sample at Follow Up N=389 (weighted percent)		
		Admission	Follow Up	Change
None	92.3	93.7	98.2	+4.5
1-3 times	7.2	6.2	1.8	-4.4
4 times or more	0.4	0.1	0.0	-0.1

Table 8. Employment Status

At follow up, over 60% of clients responded that they were employed full or part time. The percentage of clients reporting they were unemployed decreased by a modest margin. Nearly 20% of clients at admission and follow up reported not being in the labor force. Clients who indicated not being in the labor force were in one of the following categories: a homemaker, student, retired, disabled, incarcerated, or not seeking work.

Employment Status	OMS Sample at Admission N=965	OMS Sample at Follow Up N=389 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change
Employed Full Time (>35 hrs/wk)	32.5	33.0	41.2	+8.2
Employed Part Time (<35 hrs/wk)	16.4	17.0	20.9	+3.9
Unemployed (looking for work in the past 30 days)	33.0	30.6	18.3	-12.3
Not in Labor Force	18.2	19.5	19.6	+0.1

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

Table 9. Months Employed

At follow up, 67.7% of clients in the labor force were employed four months or more. There was a slight decrease in the percentage of clients who reported being employed 1-3 months; however, nearly 90% of clients indicated they were employed at least one month at follow up.

Months Employed	OMS Sample at Admission N=965	OMS Sample at Follow Up N=328 (weighted percent)		Up
(weighted percent)	Admission	Follow Up	Change	
None	29.3	24.8	10.6	-14.2
1-3 months	22.1	22.6	21.7	-0.9
4 + months	48.6	52.7	67.7	+15.0

Table 10. Monthly Income

The question regarding monthly income is asked of all clients whether they are in the labor force or not. At admission and at follow up, over 35% of clients indicated they had no monthly income. Forty-eight percent of clients indicated their taxable monthly income at follow up was \$501 to \$2000. There were increases in the two highest income categories (\$1001 to \$2000 and over \$2001) at follow up, perhaps corresponding to the previous finding (Table 9) that more clients were employed at follow up.

Monthly Income Admissi	OMS Sample at Admission N = 965	OMS Sample at Follow Up N=346 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change
None	42.8	36.1	36.0	-0.1
\$500 or less	9.7	12.0	7.5	-4.5
\$501 to \$1000	20.1	23.1	19.2	-3.9
\$1001 to \$2000	23.8	25.5	28.8	+3.3
Over \$2001	3.7	3.4	8.6	+5.2

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

Table 11. Primary Income Source

At follow up, less than 1% of clients indicated they had no income source, whereas over 62% of clients responded that wages/salary were their primary income source. Approximately one fifth of clients at both admission and follow up stated that family/friends were their primary income source.

Primary Income Source	OMS Sample at Admission N=965	OMS Sample at Follow Up N=389 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change
None	20.2	14.4	0.2	-14.2
Wages/Salary	48.3	49.1	62.2	+13.1
Family/ Friends	21.4	23.4	20.2	-3.2
Public Assistance	2.2	2.9	6.4	+3.5
Retirement/ Pension	0.3	0.4	1.3	+0.9
Disability	2.2	1.9	2.3	+0.4
SSI and SSDI	1.3	1.8	0.9	-0.9
Other	4.0	6.3	6.6	+0.3

Table 12. Days Missed Work or School

There were moderate changes between admission and follow up in client responses to how many days of work or school were missed due to substance related problems. The percent of clients who reported missing five or fewer days of work or school increased by 11.5 percentage points, while the percent of clients who reported missing six or more days of work or school decreased by 7.2 percentage points between admission and follow up. At follow up, nearly 100% of clients missed less than six days of work or school due to substance use.

Days Missed	OMS Sample at Admission N=965		OMS Sample at Follow Up N=346 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change	
Five or Fewer Days	86.3	87.7	99.2	+11.5	
Six or More Days	8.6	8.1	0.9	-7.2	
Not Applicable	5.2	4.2	0.0	-4.2	

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

Table 13. Relationship Status

Over 57% of clients reported being single at both admission and at follow up. Married was the second most common response with 13.7% of clients reporting this relationship status at admission and 16.1% at follow up. At both admission and follow up, 100% of adolescents reported being single.

Relationship Status	OMS Sample at Admission N = 965		OMS Sample at Follow Up N=389 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change	
Single	54.5	57.2	57.1	-0.1	
Married	11.9	13.7	16.1	+2.4	
Cohabitating	10.9	9.5	13.4	+3.9	
Separated	5.4	5.4	3.4	-2.0	
Divorced	16.1	12.9	9.3	-3.6	
Widowed	0.7	0.9	0.9	0.0	

Table 14. Living Arrangements

Some of the living arrangement categories are grouped together (e.g., substance abuse halfway house, correctional halfway house, group home, and transitional housing are reported together). This is because there is a difference in how SARS and I-SMART report this information, so comparison of each living arrangement separately is not possible. Over a quarter of clients reported living with their parents at both admission and follow up, the most common response at both interviews. At follow up, living alone was the second most common living arrangement (19.9%), followed by living with significant other and children (15.5%). Over 90% of adolescents, at both admission and follow up reported living with their parents.

Living Arrangements	OMS Sample at Admission N = 965	OMS Sample at Follow Up N=389 (weighted percent)		
	(weighted percent)	Admission	Follow Up	Change
Alone	16.0	17.7	19.9	+2.2
Parents	29.7	31.2	25.8	-5.4
Significant Other Only	10.5	10.1	9.9	-0.2
Significant Other and Child(ren)	12.3	12.5	15.5	+3.0
Child(ren) Only	3.7	4.2	6.2	+2.0
Other Adults	15.4	14.7	12.1	-2.6
Other Adults and Child(ren)	5.0	6.4	3.6	-2.8
Jail/Correctional Facility	2.5	0.7	0.0	-0.7
Halfway House, Group Home, Transitional Housing	2.6	1.3	5.6	+4.3
Shelter, Homeless	2.5	1.3	1.7	+0.4
Hospital	0.0	0.0	0.0	0.0

Table 15. Education at Follow Up

Table 15 examines education status at follow up by age at admission. Age is separated into two groups: adults (18 and older) and adolescents (17 and younger). Over 45% of adults have an education level of high school only at follow up; an additional 29.9% reported an education level of some college. Similar percentages of clients reported that they did not graduate high school or they had some college, 24.7% and 23.4% respectively. Nearly 89% of adolescents and 20.1% 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 at Follow Up N=389 (weighted percent)		
Level of Education	Adults N=357 (weighted percent)	Adolescents N=32 (weighted percent)	
Did Not Graduate High School	24.7	65.8	
High School Only ^	45.4	34.2	
Some College	23.4	0.0	
College Graduate	6.5	0.0	

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

Section F. Outcome: Abstinence

Tables 16 through 21 examine abstinence in relation to other variables. Abstinence is defined as responding "none" when asked during the follow up interview to identify a substance used since discharge from treatment. The follow-up interviews occur approximately six months after the client was discharged from treatment. The "follow-up period" in this report refers to the six months between the client's discharge from treatment and the follow-up interview.

Although 389 follow-up interviews were completed, individual tables may contain data from fewer clients as they may have declined to answer that particular question. The N for each response represents the number of abstinent clients out of the number of total clients who indicated that response. For tables 16 through 21, 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.

[^] Clients who receive a General Education Degree (GED) are grouped with clients in the "High School Only" category.

Table 16. Abstinence by Primary Substance

Ninety-seven of the 211 clients (45.7%) whose primary substance at admission was alcohol were abstinent at follow up. Additionally, clients who indicated marijuana as their primary substance at admission abstained at a rate of 43.9%; clients who indicated methamphetamine as their primary substance at admission abstained at a rate of 49.7%; and clients indicating cocaine as their primary substance at admission abstained at a rate of 60.6%.

Primary Substance at Admission	OMS Sample (N=389) Abstinent at Follow Up weighted percent (N)	
Alcohol	45.7 (97/211)	
Cocaine/Crack	60.6 (10/16)	
Marijuana/Hashish	43.9 (50/114)	
Methamphetamine	49.7 (19/39)	
Heroin	0.0 (0/0)	
Non-Prescription Methadone	0.0 (0/0)	
Other Opiates and Synthetics	29.9 (2/5)	
PCP	0.0 (0/0)	
Other Hallucinogens	0.0 (0/0)	
Other Amphetamine	0.0 (0/0)	
Other Stimulants	0.0 (0/0)	
Benzodiazepines	0.0 (0/0)	
Other Tranquilizers	0.0 (0/0)	
Barbiturates	100.0 (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 (0/0)	
Other Prescribed Analgesics	0.0 (0/0)	
Other	100.0 (1/1)	

Table 17. Abstinence by Employment

There is a statistically significant association between abstinence and employment at follow up (Cochran-Mantel-Haenszel Test, p <0.01). More than a quarter of the clients (26.2%) who were unemployed at follow up reported being abstinent. However, for the remaining employment categories approximately half of the clients were abstinent at follow up. Clients who indicated not being in the labor force were in one of the following categories: a homemaker, student, retired, disabled, incarcerated, or not seeking work.

English and Otation	OMS Sample at Follow Up N=389		
Employment Status	Abstinent weighted percent (N) *	Non-Abstinent weighted percent (N)	
Employed Full Time (>35 hrs/wk)	48.1 (77/160)	52.0 (83/160)	
Employed Part Time (<35 hrs/wk)	50.8 (41/81)	49.2 (40/81)	
Unemployed (looking for work in the past 30 days)	26.2 (19/71)	73.8 (53/71)	
Not in Labor Force	56.4 (43/76)	43.6 (33/76)	

^{*}Statistically significant (Cochran-Mantel-Haenszel Test, p <0.01).

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 17a. Change in Employment and Abstinence at Follow Up

Table 17a presents a comparison of clients at follow up who were abstinent versus clients who were not abstinent on the variable of employment. Increased employment includes clients who have changed from not being in the labor force or unemployed to having any employment, or those who changed from being employed part time to full time. Decreased employment includes clients who changed from having any employment to being unemployed or not in the labor force, or those who changed from being employed full time to part time. Clients who were abstinent at follow up were slightly more likely to show an increase in employment than those who were not abstinent. Additionally, non-abstinent clients were slightly more likely to show a decrease in employment than abstinent clients.

	OMS Sample at Follow Up N=389		
Employment Status	Abstinent N=180 (weighted percent)	Non-Abstinent N=209 (weighted percent)	
Increased Employment	34.4	31.1	
Maintained Full-Time Employment	24.5	22.0	
Maintained Part-Time Employment	4.5	7.3	
Maintained Unemployment	6.3	11.9	
Maintained Not in Labor Force	12.8	8.2	
Decreased Employment	17.5	19.5	

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. Abstinence by Living Arrangements

Some of the living arrangement categories are grouped together (e.g., substance abuse halfway house, correctional halfway house, group home, and transitional housing are reported together). This is because there is a difference in how SARS and I-SMART report this information, so comparison of each living arrangement separately is not possible. There was a statistically significant difference in abstinence among the living arrangement groups at follow up (Likelihood Ratio Chi-Square Test, p <0.001). Some of the highest abstinence rates were found with clients who lived with their significant other only, alone, and with their significant other and child(ren). The groups who had the lowest abstinence rates were found among those who reported living with their parents, other adults, or living with child(ren) only (i.e., single parents) at follow up. Over 90% of adolescents, both at admission and at follow up reported living with their parents.

Living Assessments	OMS Sample at Follow Up N=389		
Living Arrangements	Abstinent weighted percent (N) *	Non-Abstinent weighted percent (N)	
Alone	56.6 (44/77)	43.4 (34/77)	
Parents	36.9 (37/100)	63.1 (63/100)	
Significant Other Only	57.9 (22/38)	42.1 (16/38)	
Significant Other and Child(ren)	51.1 (31/60)	48.9 (29/60)	
Child(ren) Only	34.9 (8/24)	65.1 (16/24)	
Other Adults	27.2 (13/47)	72.8 (34/47)	
Other Adults and Child(ren)	41.5 (6/14)	58.5 (8/14)	
Jail/Correctional Facility	0.0 (0/0)	0.0 (0/0)	
Homeless, Shelter	67.3 (4/7)	32.7 (2/7)	
Halfway House, Group Home, Transitional Housing	68.1 (15/21)	31.9 (7/21)	
Hospital	0.0 (0/0)	0.0 (0/0)	

^{*}Statistically significant (Likelihood Ratio Chi-Square Test, p <0.001).

Table 19. Abstinence by Monthly Income

There were no significant associations between amount of income and abstinence. All but one of the income categories at follow up had a 40% to 50% abstinence rate. Clients who reported earning \$500 or less per month were the exception, with only about one third of the clients reporting abstinence.

Manthhalassas	OMS Sample at Follow Up N=346		
Monthly Income	Abstinent weighted percent (N)	Non-Abstinent weighted percent (N)	
None	43.8 (55/124)	56.2 (70/124)	
\$500 or less	30.9 (8/26)	69.1 (18/26)	
\$501 to \$1000	47.2 (31/67)	52.8 (35/67)	
\$1001 to \$2000	46.1 (46/100)	53.9 (54/100)	
Over \$2000	42.8 (13/30)	57.2 (17/30)	

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.

Table 19a. Change in Income and Abstinence at Follow Up

Table 19a presents a comparison of clients at follow up who were abstinent versus clients who were not abstinent on the variable of income. Increased income indicates clients have moved from a smaller income category to a larger income category. Decreased income indicates clients have moved from a larger income category to a smaller income category. There was a significant association between abstinence and change in income at follow up (Likelihood Ratio Chi-Square Test, p <0.05). Of the clients who were abstinent at follow up, 43.2% increased their income, compared to 30.5% who were not abstinent. Clients who were not abstinent at follow up were over two times more likely to maintain an income of \$1001 to \$2000 than abstinent clients were.

Change in Income	Income Status at Follow Up * N=347				
	Abstinent N=153 (weighted percent)	Non-Abstinent N=194 (weighted percent)			
Increased Monthly Income	43.2	30.5			
Maintained Over \$2000	0.8	2.3			
Maintained \$1001 to \$2000	6.5	14.2			
Maintained \$501 to \$1000	4.6	7.6			
Maintained \$500 or Less	2.5	3.6			
Maintained None	14.8	21.4			
Decreased Monthly Income	27.7	20.4			

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

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 20. Abstinence by Primary Income Source

Table 20 presents responses at both admission and follow up for clients who completed the follow-up interview. The second column lists the percentage of abstinent clients at follow up who reported an income source at admission. The third column lists the percentage of abstinent clients who reported an income source at follow up.

There was a statistically significant association between income source at admission and abstinence at follow up (Likelihood Ratio Chi-Square Test, p <0.001). Clients who reported having "other" income at admission had the lowest abstinence rate of 24.3% at follow up. Those reporting wages/salary or family/friends as their primary income source at admission had similar abstinence rates at follow up, 46.9% and 44.3% respectively. Abstinence rates were also similar for those clients who reported wages/salary as their primary income source at admission (46.9%) and those who reported wages/salary at follow up (46.8%). One hundred percent of clients who indicated public assistance as their primary income source at admission were abstinent at follow up.

	OMS Sample at Follow Up N=389			
Primary Income Source	Income Source at Admission by Abstinence at Follow Up * weighted percent (N)	Income Source at Follow Up by Abstinence at Follow Up weighted percent (N)		
None	43.7 (24/56)	100.0 (1/1)		
Wages/ Salary	46.9 (90/191)	46.8 (113/242)		
Family/ Friends	44.3 (40/91)	43.5 (34/79)		
Public Assistance	100.0 (11/11)	51.0 (13/25)		
Retirement/ Pension	100.0 (2/2)	25.3 (1/5)		
Disability	35.9 (3/7)	84.6 (7/9)		
SSI and SSDI	65.3 (4/7)	38.1 (1/3)		
Other	24.3 (6/24)	35.4 (9/26)		

^{*} Statistically significant (Likelihood Ratio Chi-Square Test, p <0.001).

Table 21. Abstinence by Arrests

There was a statistically significant difference between arrest categories at follow up and abstinence at follow up in Table 21 (Cochran-Mantel-Haenszel Test, p <0.001). The percentage of abstinent clients who reported no arrests during the follow-up period (50.1%) was nearly double that of the percentage of abstinent clients who reported being arrested 1 to 3 times (25.8%).

	OMS Sample at Follow Up N=389			
Arrests	Abstinent weighted percent (N) *	Non-Abstinent weighted percent (N)		
None	50.1 (164/328)	49.9 (164/328)		
1-3 times	25.8 (16/61)	74.2 (45/61)		
4 times or more	0.0 (0/0)	100.0 (0/0)		

^{*}Statistically significant (Cochran-Mantel-Haenszel Test, p <0.001).

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 22. AA/NA or Similar Meetings Attended

Out of the 389 clients at follow up, 180 were abstinent and 209 were not abstinent. Almost three quarters of clients who were not abstinent did not attend any AA/NA meetings during the follow-up period, compared to just over half of the abstinent clients. There was a statistically significant difference between abstinence and AA/NA meeting attendance during the follow-up period (Likelihood Ratio Chi-Square Test, p <0.0001). Nearly half of the abstinent clients attended one or more AA/NA meetings during the follow-up period, compared to over a quarter of non-abstinent clients. Of the abstinent clients who attended at least one AA/NA meeting per month in the follow-up period, the median number of meetings per month was six. Non-abstinent clients attended fewer meetings, with a median number of meetings per month of three.

AA/NA Meetings at Follow Up	No Meetings weighted percent (N) *	1 or More Meetings weighted percent (N) *	Median Number of Meetings (N)
Abstinent	51.2 (92)	48.8 (88)	6.0 (88)
Non-Abstinent	72.4 (151)	27.6 (58)	3.0 (58)

^{*}Statistically significant (Likelihood Ratio Chi-Square Test, p <0.0001).

Section G. Outcomes: Arrests and Employment

Table 23 examines arrests in relation to primary substance use. For purposes of this report, clients were categorized as having no arrests since discharge or having at least one arrest 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. Although 389 follow-up interviews were completed, individual tables may contain data from fewer clients as they may have declined to answer that particular question. For tables 23 and 24, 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 23. No Arrests by Primary Substance at Admission

There were no significant differences between arrests at follow up and primary substance reported at admission. The four most commonly used substances, (alcohol, marijuana, methamphetamine, and cocaine,) all had no arrest rates of over 75% at follow up.

Primary Substance at Admission	OMS Sample (N=389) No Arrests at Follow Up weighted percent (N)
Alcohol	86.5 (183/211)
Cocaine/Crack	79.7 (13/16)
Marijuana/Hashish	82.8 (95/114)
Methamphetamine	75.3 (29/39)
Heroin	0.0 (0/0)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	100.0 (5/5)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	100.0 (0/0)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/0)
Other Tranquilizers	0.0 (0/0)
Barbiturates	100.0 (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 (0/0)
Other Prescribed Analgesics	0.0 (0/0)
Other	100.0 (1/1)

Table 24 examines employment in relation to primary substance use. For purposes of 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 24. Full-Time Employment by Primary Substance at Admission

There were no significant associations between type of primary substance reported at admission and full-time employment. Nearly half of the clients whose primary substance at admission was alcohol were employed full time at follow up. Nearly two fifths of the clients who reported methamphetamine as their primary substance at admission were employed full time at follow up. One third of those who reported marijuana as their primary substance at admission indicated full-time employment at follow up. Just over one fourth of the clients who reported cocaine as their primary substance at admission were employed full time at follow up.

Primary Substance at Admission	OMS Sample (N=389) Employed Full Time at Follow Up weighted percent (N)
Alcohol	47.4 (100/211)
Cocaine/Crack	26.4 (4/16)
Marijuana/Hashish	32.2 (37/114)
Methamphetamine	37.8 (15/39)
Heroin	0.0 (0/0)
Non-Prescription Methadone	0.0 (0/0)
Other Opiates and Synthetics	66.1 (3/5)
PCP	0.0 (0/0)
Other Hallucinogens	0.0 (0/0)
Other Amphetamine	100.0 (0/0)
Other Stimulants	0.0 (0/0)
Benzodiazepines	0.0 (0/0)
Other Tranquilizers	0.0 (0/1)
Barbiturates	100.0 (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 (0/0)
Other Prescribed Analgesics	0.0 (0/0)
Other	0.0 (0/1)

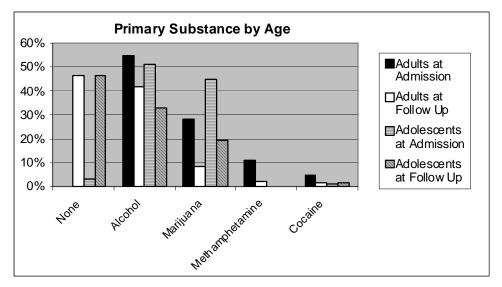
Section H. Outcomes by Age and Gender

Section H describes the 389 clients who completed the follow-up interview. Of these 389 clients, 357 were adults (92%) and 32 were adolescents (8%). There were 262 males (67%) and 127 females (33%). Charts 4 through 5a represent selected variables presented by gender and age. The variables include primary substance and frequency of use. In Charts 4 through 5a, 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.

The four substances that clients reported most often as primary were alcohol, marijuana, methamphetamine, and cocaine (see Table 1 on page 8). Charts 4 and 4a show the percentage of males, females, adults, and adolescents in association with these four substances at admission and follow up.

Chart 4. Primary Substance by Age

Alcohol was the most commonly reported primary substance among adults and adolescents (over 50% of both groups indicating this) at admission. Nearly half of the adolescents (44.8%) reported marijuana as their primary substance, compared to only a little more than a quarter (28%) of adults. None of the



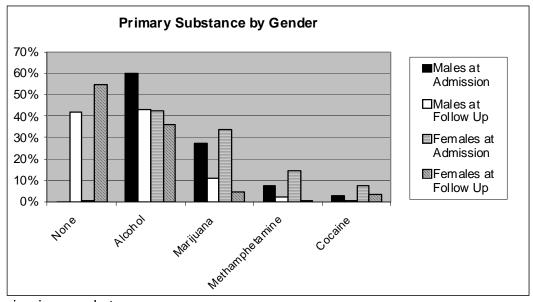
adolescents reported methamphetamine as a primary substance at admission or follow up.

Adults had a larger increase in the percentage of clients who were abstinent between admission and follow up compared to adolescents. Adolescents had an 18.4 percentage point decrease in the number of clients reporting alcohol as their primary substance and a 25.4 percentage point decrease in the number of clients reporting marijuana use from admission to follow up.

Chart 4a. Primary Substance by Gender

Nearly 20% more males reported alcohol as their primary substance at admission than females.

However a higher percentage of females reported marijuana, cocaine, or methamphetamine as their primary substance at admission. There was a higher percentage of females (33.8%) than males (27.3%) who reported marijuana as a primary substance at admission, however at follow up, there was a higher percentage of males (11.3%) than females (4.5%) who



reported marijuana as their primary substance.

Between admission and follow up, males had a larger decrease in reporting alcohol as their primary substance compared to females: 16.7 percentage points for males and 6.8 percentage points for females. Among all groups, females had the largest increase in abstinence between admission and follow up, 54.3 percentage points.

Charts 5 and 5a are subsets of the total group who completed the follow up interview (389), and present the change in frequency of use for those who reported the same primary substance at *both* admission and follow up. Charts 5 and 5a show the percentage of males, females, adults, and adolescents in association with the frequency of use of primary substance at admission and follow up, a group of 305 clients. Of this group, 203 were males (67%) and 102 were females (33%); 276 were adults (90%) and 29 were adolescents (10%).

Chart 5. Frequency of Use of Primary Substance by Age

Nearly 60% of adults at follow up reported no use in the past six months, compared to just over 50% of adolescents. At follow up, there were similar percentages of adults and adolescents who used a primary substance 1 to 2 times per week, 13.1% and 13.7%, respectively. Less than 10% of adults had not used any substances in the past month at follow up, compared to nearly a quarter of the adolescents. There was a large decrease (35.9 percentage points) in adolescents who were using a substance 1-3 times in the past month at admission compared to follow up; perhaps due to these clients entering the "no use in past six month" category.

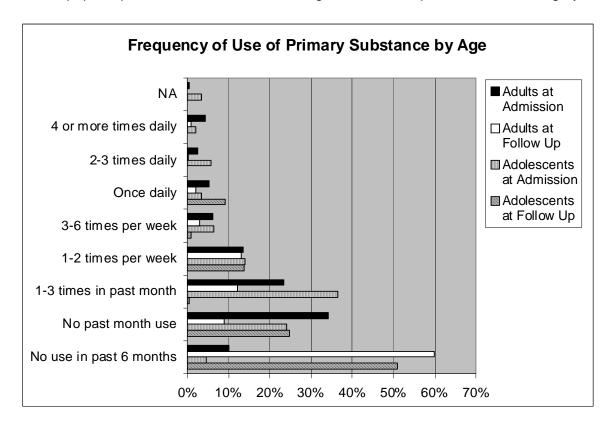
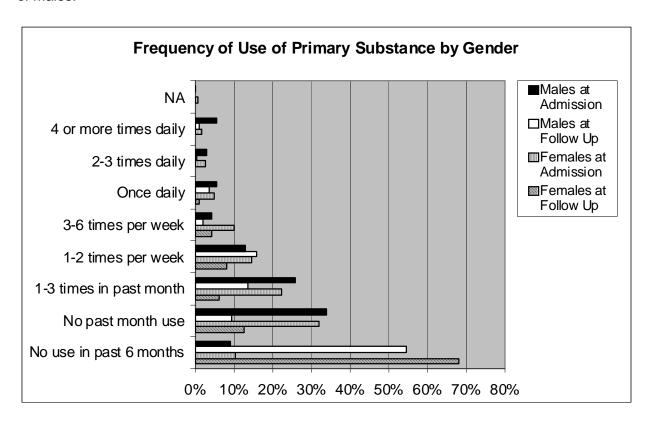


Chart 5a. Frequency of Use of Primary Substance by Gender

Over 80% of females at follow up reported no use in the past month or longer, with an additional 6.2% reporting use 1-3 times in the past month. For males, a little over 60% at follow up reported no use in the past month or longer, with an additional 13.5% reporting use 1-3 times in the past month. Unlike any other frequency category, the percentage of males who used a substance 1-2 times per week increased from admission (13.1%) to follow up (15.8%). However, females showed a 6.6 percentage point decrease in this category. At follow up, only 13.2% of females reported using a substance 1-2 times per week or more, compared to 22.7% of males.



Section I. Length of Stay and Discharge Status

Length of stay is defined as the number of days from client admission through discharge. In Table 25, "abstinent" refers to the percentage of clients who had no use during the follow-up period for each length of stay range. The numbers in parentheses represent the approximate number of clients who were abstinent and the approximate total number of clients who were in that length of stay range. For example, of the 32 clients who were in treatment less than seven days, 14 were abstinent at follow up, equaling an abstinence rate of 45.1%. Numbers in the "no arrests" and "employed full time" columns are presented the same way as abstinence. For tables 25 through 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.

Table 25. Length of Stay by Outcome Variables

There were no significant associations between length of stay and abstinence, arrests, or full-time employment at follow up. The most common length of stay was 31-60 days.

Clients who were in treatment at least four months had the highest abstinence rate of 50%.

Clients who were in treatment for 31-60 days had the highest no arrest rate (88.7%), however all clients who remained in treatment for at least 7 days had a no arrest rate of over 80%. Clients who remained in treatment less than 7 days were more likely to be arrested during the follow-up period than any other length of stay category.

Clients who remained in treatment for 91-120 days were more likely to be employed full time at follow up than any other length of stay category. Clients who were in treatment for less than 7 days were the least likely to be employed full time at follow up.

Langth of Ctoy	OMS Sample at Follow Up N=389				
Length of Stay	Abstinent weighted percent (N)	No Arrests weighted percent (N)	Employed Full Time weighted percent (N)		
Less than 7 days	45.1 (14/32)	69.7 (22/32)	27.9 (9/32)		
7 - 30 days	46.2 (35/76)	88.1 (67/76)	41.6 (31/76)		
31 - 60 days	45.7 (47/104)	88.7 (92/104)	44.3 (46/104)		
61 - 90 days	45.3 (29/63)	81.2 (51/63)	38.2 (24/63)		
91 - 120 days	42.1 (14/33)	85.5 (28/33)	46.8 (16/33)		
More than 120 days	50.0 (41/81)	82.9 (67/81)	42.2 (34/81)		

Admission data revealed the top four reported primary substances to be: alcohol, marijuana, methamphetamine, and cocaine (see Table 1, page 8). Table 26 presents the percentage of clients in each length of stay category for these substances. The table also presents the median length of stay for each primary substance reported at admission.

Table 26. Length of Stay by Primary Substance at Admission

Unlike previous tables in this section that include data only from clients who completed follow-up interviews, data in Table 26 are drawn from the entire group of 965 clients sampled in 2007.

For clients whose primary substance at admission was methamphetamine, just over a quarter were in treatment less than 7 days. About one fifth of the clients whose primary substance at admission was marijuana were in treatment this length of time as well. The four substance groups did not significantly differ in length of stay. Clients whose primary substance at admission was marijuana had the longest median length of stay of 46 days, and clients whose primary substance at admission was cocaine had the shortest median length of stay of 38 days, a difference of only 8 days.

Length of Stay							
Primary Substance at Admission	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	Median Length of Stay Days
Alcohol N=478	17.1	17.1	26.6	13.8	7.6	17.8	45
Marijuana/Hashish N=270	20.2	17.1	20.1	15.8	9.4	17.5	46
Methamphetamine N=152	25.9	17.5	13.1	11.9	4.1	27.5	41
Cocaine/Crack N=48	14.2	25.1	21.8	16.0	10.4	12.6	38

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. Discharge Status by Outcome Variables

Table 27 shows the discharge status by the outcome variables of abstinence, arrests, and employment. There are three discharge categories: successful completion; terminated (clients discharged from the program due to noncompliance); and neutral (this category includes, but is not limited to, those who are discharged due to legal issues related to a sentence, medical reasons, receipt of maximum benefits, referred to another program, or death).

The highest abstinence, no arrest, and full-time employment rates at follow up were found with clients who had successfully completed treatment, or had been discharged for neutral reasons. There was a statistically significant difference between discharge status and the no arrest rate (Cochran-Mantel-Haenszel Test, p <0.0001). Over 60% of clients who completed the follow-up interview were successfully discharged from treatment. Clients who were successfully discharged from treatment were more likely to have no arrests (91.2%) than those who were terminated (73.8%) or were discharged because of neutral reasons (74.4%).

OMS Sample at Follow Up					
Discharge Status	Z			Employed Full Time weighted percent (N)	
Successful Completion	234	49.4 (116)	91.2 (214)	42.9 (101)	
Terminated	135	40.1 (54)	73.8 (99)	38.0 (51)	
Neutral Discharge	20	51.0 (10)	74.4 (15)	43.1 (9)	
Total	389	46.3 (180)	84.3 (328)	41.1 (160)	

^{*}Statistically significant (Cochran-Mantel-Haenszel Test, p < 0.0001).

Section J. Clients Perceived Benefits

Table 28. Clients Perceived Benefits

Table 28 indicates client responses at the follow-up interview when asked their opinion of the various types of treatment received in the substance abuse treatment programs. "Very beneficial" was the response indicated most often for individual and group counseling. Results from 389 completed interviews at six months post discharge indicate that 351 of the clients (90.2%) feel that the substance abuse treatment they received was either "very beneficial" or "beneficial". Clients who responded "did not receive" for a certain type of counseling could have done so for various reasons including: type of counseling was not recommended, type of counseling was not offered, or type of counseling was offered but client chose not to participate.

Perceived Benefit of Counseling	Individual Counseling weighted percent (N)	Family Counseling weighted percent (N)	Group Counseling weighted percent (N)	Educational Counseling weighted percent (N)	Overall Rating of Treatment Program weighted percent (N)
Very Beneficial	43.6 (169)	4.9 (19)	33.6 (131)	34.4 (134)	40.5 (158)
Beneficial	30.1 (117)	1.3 (5)	30.6 (119)	35.4 (138)	49.5 (193)
Not Beneficial	6.7 (26)	1.6 (6)	18.1 (70)	14.6 (57)	10.0 (39)
Don't Know	0.0 (0)	0.0 (0)	0.0 (0)	0.1 (0)	0.0 (0)
Did Not Receive	19.6 (76)	92.3 (353)	17.8 (69)	15.6 (61)	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%.

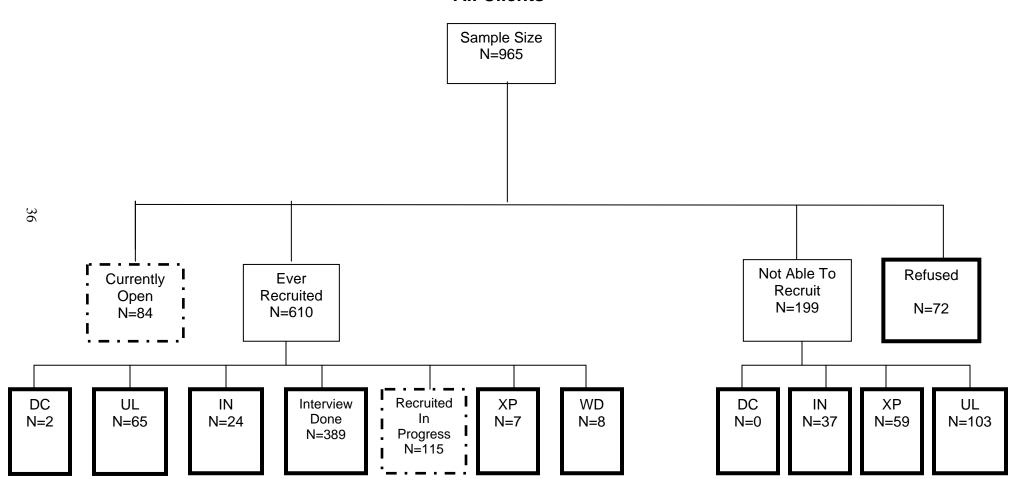
APPENDIX: Presentation of Tracking Data

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Table A1. Client Classification Codes

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. Included are clients who are new to the sample, have been sent a letter, or have no working phone and have not yet responded to multiple letters.
Recruited	This includes clients, who at some point, agreed to participate in the follow-up interview. Included are clients who were recruited but died before their interview date, 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, or were recruited but withdrew from the project.
Not Able to Recruit	This includes clients that staff has never been able to successfully contact. Included are clients who died before staff could contact them, 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, and clients who had not been contacted but had a potential interview date that had already passed when the Consortium received notice of the client's discharge date.
Refused (RF)	Client refused participation in the follow-up interview. Case is closed.
Deceased (DC)	Client died before recruitment or client was recruited but died before the interview could take place. Case is closed.
Withdrew (WD)	Client initially agreed to participate in the study but then decided not to participate in the project. Case is closed.
Expired (XP)	When staff 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 or Interview Done	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 (UL)	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 (IN)	Client incarcerated at the time interview was due to take place. The client may or may not have been successfully recruited. Case is closed.

Diagram A1: Outcomes Monitoring System January 1 – December 31, 2007 All Clients*



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.)

Outcomes Monitoring System Tracking Report Clients Admitted in 2007

Table A2. Case Status - All Clients (965)

Status	Number of Clients		
Open Cases	199		
Closed Cases	766		
Total	965		

Table A3. Closed by Category

Category Name	Number of Clients	Percentage of Clients
Follow-Up Interview Complete	389	50.8
Unable to Locate	168	21.9
Refused Participation	72	9.4
Incarcerated	61	8.0
Expired	66	8.6
Withdrew	8	1.0
Deceased	2	0.3
Total	766	100.0

Table A4. Recruitment and Follow-Up Rates

Category	Percentage		
Recruitment Rate	77.7 (610/785)		
Refusal Rate	10.4 (80/766)		
Follow-Up Rate	84.2 (389/462)		

Number and Type of Client Contact January 1 – December 31, 2007

Table A5. Number and Type of Client Contact

Table Ao. Number and Type of Official Contact				
Type of Contact	Adolescent	Adult	Total	
An outgoing phone call attempting to recruit client.		4,331	4,754	
An outgoing phone call in which recruitment has actually taken place and the client has either agreed to participate or refused. 51		430	481	
An incoming phone call in which recruitment has actually taken place and the client has either agreed to participate or refused.				
An outgoing phone call attempting to update/check-in with client.		2,899	3,167	
An incoming or outgoing phone call in which a successful update occurs with client.			980	
An incoming phone call from client or collateral contact (not from treatment agency).		296	319	
An outgoing phone call attempting to reach client for the 6-month follow-up interview.	231	1,741	1,972	
An outgoing phone call completing the 6-month follow-up interview.	44	312	356	
An incoming phone call in with the 6-month follow-up interview is completed.	3	30	33	
An outgoing phone call attempting to track client through collateral contacts.	3	162	165	
Any incoming and outgoing attempts (phone call/letter/fax) to track client through original treatment agency.	33	472	505	
Other - usually directory assistance, Internet search, or any call/contact that doesn't fall under any other category.	116	2,642	2,758	
A letter sent to contact client; includes letters that have been returned and notification of address changes from post office; outgoing or incoming.	372	4,920	5,292	
All Client Contacts	1,655	19,265	20,920	

OMS Client Contact Data January 1 – December 31, 2007 All Clients with Closed Cases *

Table A6. Mean Number of Contacts per Client

Status	Clients	All Contacts	Contacts (Mean)	Letters
Interviews Completed	389	8,793	22.6	1,970
Unable to Locate	168	4,713	28.1	1,505
Refused	72	617	8.6	144
Incarcerated	61	1,540	25.2	351
Expired	66	521	7.9	161
Withdrew	8	208	26.0	45
Deceased	2	32	16.0	11
Grand Total	766	16,424	21.4	4,187

 $^{^{\}star}$ Information in Table A6 represents only closed cases. Cases are closed for 79% of the 965 clients in this report.