

# Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project

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## 2001 Progress Report

December 2001

*Washington State Department of Social and Health Services  
Management Services Administration  
Research and Data Analysis Division*



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Supplemental Security Income (SSI)  
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*Washington State Department of Social and Health Services*  
Management Services Administration  
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## Summary

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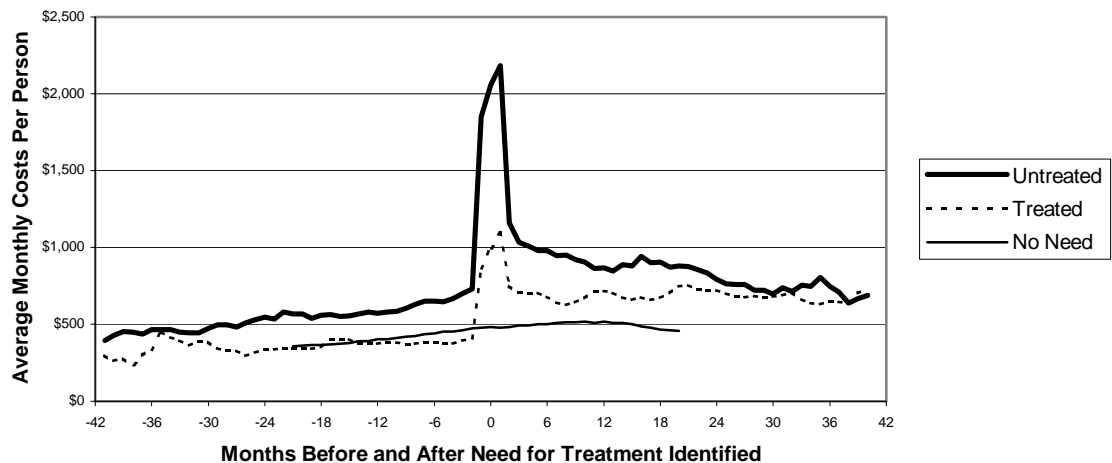
Differences in medical costs were examined for recipients of Supplemental Security Income (SSI) who received chemical dependency (CD) treatment compared to those who appeared to need such treatment but did not get it.

*How much do medical costs differ between SSI recipients who are treated for chemical dependency and those who need such treatment but do not get it?*

Average monthly medical costs, including estimated CD treatment expenses, were **\$540 lower** per person among SSI recipients who received CD treatment than medical costs alone for those who needed AOD treatment but did not get it. Over a 12-month period, this would result in a difference of **\$6,480 per person**.

The greatest differences in medical and treatment costs between the treated and untreated SSI recipients were found among older SSI recipients (\$931 for persons 45 years and over), those who were not arrested for drug- or alcohol-related offenses (\$739), and those who were eligible for Medicaid but not Medicare (\$704).

**Average Monthly Medical and Chemical Dependency Treatment Costs  
Before and After Need for Treatment Identified  
Washington State SSI Recipients, July 1997 - December 2000  
(3-Month Rolling Averages)**



*How many SSI recipients needed treatment and how many got it?*

Need for treatment was identified based on medical diagnoses and procedures, receipt of alcohol or drug abuse (AOD) treatment, and arrests for drug- or alcohol-related offenses. Out of the nearly 104,000 people who were identified as eligible for SSI during the study period from July 1997 through December 2000, 13,738 (13 percent) appeared to need

treatment for chemical dependency. Of those who needed treatment, 38 percent received treatment during the study period.<sup>1</sup>

*How many more SSI clients were admitted to treatment?*

- The SSI Cost Offset Pilot Project was implemented in November 1999 in 16 counties that serve about 90 percent of the SSI clients who receive chemical dependency treatment.
- Between January and December 2000, the monthly admissions averaged 166, an increase of **30 admissions** per month above the average of 136 admissions per month in the 34 months before the SSI Cost Offset Pilot Project began. Over the course of a year, the higher average admissions would result in about **360 more** SSI clients entering treatment than would have been expected based on the previous three years.
- The highest number of additional SSI clients admitted to AOD treatment occurred in the summer of 2000. The average of the four highest consecutive months was 186, 50 more than the prior 34-month average of 136.
- For budgetary purposes, **40 extra admissions per month, or 480 per year**, were used to estimate the possible consequences of the medical and CD treatment cost differences between the treated and untreated SSI clients who needed AOD treatment.

*Did the treated and untreated groups differ in demographics or other characteristics?*

- The treated and untreated groups were fairly similar in composition by race. Both treated and untreated groups were predominantly white (about 74 percent).
- Treatment rates varied across racial/ethnic groups with Asians and African Americans highest (40 and 39 percent, respectively), and Native Americans lowest (35 percent); rates for the other groups were about 38 percent.
- Although males outnumbered females in both groups, this tendency was strongest in the untreated group. Males represented 54 percent of the treated group and 58 percent of the untreated group.
- Those who received AOD treatment were younger (69 percent under 45 years of age) than those who needed treatment but did not get it (59 percent under 45).
- The AOD treatment penetration rate was lowest (18 percent) for SSI recipients aged 65 or older and highest (42 percent) for those aged 25 to 44.
- Before the need for chemical dependency treatment was identified, the untreated SSI recipients had higher Medicaid costs (\$648 per month) than those for people who later received AOD treatment (\$387 per month). This difference was statistically significant. These costs may represent differences in underlying chronic illness between the two groups, and, therefore, were included in the regression analyses used to estimate potential cost offsets associated with getting AOD treatment.

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<sup>1</sup> Since clients were eligible for SSI for an average of 37 months (out of the 42-month period), these rates of treatment need and receipt of treatment are not directly comparable to annual rates reported in other studies which are based on administrative, clinical, or survey data.



- After the need for treatment was identified, average monthly costs were \$740 and \$1,445 for the treated and untreated groups, respectively, an **unadjusted difference of \$705**. An **adjusted difference of \$540** remained when substance abuse treatment costs and differences between the two groups in age, race, sex, and prior Medicaid costs were taken into account.

*Did receiving AOD treatment offset Medicaid costs? What were the effects of other significant variables?*

- Receipt of AOD treatment – Average monthly Medicaid and AOD treatment expenses of those who received AOD treatment were \$540 less than Medicaid costs for those who needed treatment but did not get it.
- Gender – On average Females cost \$106 more per month than males after the need for treatment is identified when other variables are taken into account.
- Age – Average monthly costs after receiving AOD treatment for persons 45 years or older were \$624 more than those for SSI recipients aged 18-44 years.
- Costs prior to need for treatment – Higher medical costs before the need for treatment was identified were associated with higher costs afterwards (36 cents per dollar per month) when other factors (i.e., AOD treatment, age, sex, and race) were held constant.

*What are the potential savings if more SSI clients are treated for alcohol or drug dependency?*

Potential savings that may be associated with getting more SSI clients into chemical dependency treatment will vary depending on the number of additional SSI clients who receive treatment. If chemical dependency treatment programs were to serve an extra 30 clients per month (the average number of extra SSI clients admitted per month in calendar year 2000), then **360 additional** clients would begin treatment in a year and the potential annual avoided medical costs would be **\$2.3 million**.

If chemical dependency treatment programs can provide services to 40 extra clients per month (the midpoint between the one-year average of 30 and the four-month peak of 50 extra SSI admissions), this would result in **480 extra** clients a year and a potential annual savings of **\$3.1 million** in avoided medical costs.



# *1 Introduction*

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This report is an investigation of Medicaid expenses and chemical dependency (CD) treatment costs for recipients of Supplemental Security Income (SSI) in Washington State. Clients who received chemical dependency treatment had significantly lower monthly medical expenses after their need for treatment was identified compared to those who needed treatment but did not get it.

## *Context and Underlying Questions*

A growing body of research (Finigan 1996, Gerstein et al. 1994, Kohlenberg et al. 1999, Luchansky and Longhi 1997, Luxenberg et al. 1996, Holder and Hallan 1986, Holder and Blose 1986 and 1992) indicates that treatment for substance abuse may avert subsequent medical costs that might otherwise occur. This relationship has been found both for public clients and for those supported by private health insurance. Among clients of the Department of Social and Health Services (DSHS), recipients of SSI appeared to have the greatest potential for saving or averting costs if they were to receive substance abuse treatment (Kohlenberg et al. 1999).

Due to the considerable amount of potential savings of public funds, the SSI Cost Offset Pilot Project was established to provide more chemical dependency treatment among SSI clients. A total of \$2.5 million in funds, including federal Title XIX match, were provided to pay for additional AOD treatment of SSI clients in the 1999-2001 biennium. Based on preliminary results available in March 2001, additional funding was made available to extend this project through the 2001-2003 biennium.

An evaluation component of the project was established to determine whether or not receiving AOD treatment resulted in any cost differences among SSI recipients who were identified as needing such treatment. Need for treatment was determined based on both medical and criminal criteria.<sup>2</sup> This report focuses exclusively on Medicaid cost outcomes and AOD treatment expenses and does not include Medicare expenses.

This paper addresses three basic questions:

- Did admissions of SSI clients to AOD treatment increase after the SSI Project intervention began in November 1999?
- What are the medical cost differences between SSI clients who receive chemical dependency treatment and those who need treatment but do not get it?
- To what extent do age, arrestee status, and eligibility status for Medicaid and Medicare affect medical cost differences associated with receipt of chemical dependency treatment?

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<sup>2</sup> The addition of criminal arrest records for drug- or alcohol-related offenses is a major change from the preliminary report released in draft in March 2001. An additional 1,356 SSI recipients were added to the “need for treatment” group who had not been identified based on medical criteria

### *Project Implementation*

When the SSI Cost Offset Pilot Project was implemented in November 1999, local referral sources (e.g., Regional Support Networks for mental health practitioners, physicians) were alerted to the availability of the project funds and local networks were encouraged to expand referrals for SSI clients in need of treatment. Also, the ADATSA assessment process was made available to SSI recipients. These efforts were intended to increase referrals of SSI clients for treatment and to improve the ease of getting them assessed so that they could be admitted more readily to available treatment programs. (For more detail, see “Appendix A. Project Implementation.”)

The SSI Cost Offset Pilot Project made additional funds available to provide treatment for SSI recipients in 16 counties that serve about 90 percent of the state’s SSI clients. Activities were undertaken at the county level to expand outpatient services and to strengthen the local process for assessing SSI clients’ needs and referring them for treatment. Preliminary analyses revealed that those who entered treatment after the pilot project began were similar to SSI clients admitted to treatment in the previous 34 months based on comparisons on demographic, socioeconomic, medical, mental health, and substance use characteristics.

### *Identifying Need for Treatment*

Medical and chemical dependency treatment records for more than 103,000 adult SSI recipients were examined to determine their need for and receipt of treatment for chemical dependency. Of these, 13 percent evidenced a need for chemical dependency treatment based on either medical criteria (e.g., diagnoses, procedure and revenue codes, detoxification, or receipt of AOD treatment) or criminal arrest records for alcohol- or drug-related offenses. Of those who appeared to need treatment, 37 percent received it sometime during the 42-month period from July 1997 through December 2000.

### *Cost Offsets*

Once the need for CD treatment was identified, average monthly medical and AOD treatment costs were **\$540 lower** for those who got CD treatment than Medicaid costs for those who appeared to need treatment but did not get it. These differences were based on regression equations in which other variables (age, race, gender, and prior monthly medical costs) are taken into account. The cost difference was over and above chemical dependency treatment costs averaging **\$2,956 per person** which were included in the expenses considered for those who got CD treatment. The resulting annual cost difference was **\$6,480 per person**.

The amount of the apparent medical cost differences varied among several important subgroups within the SSI population. The greatest differences between treated and untreated SSI recipients in average monthly Medicaid and CD treatment costs were found among those who, during the study period, were 45 years or older (\$931), were not arrested for drug- or alcohol-related offenses (\$739) and only received Medicaid (\$704). Smaller, but still statistically significant, differences were found for younger recipients

(\$351) and those eligible for both Medicare and Medicaid (\$108), called “dual eligibles.” However, among SSI recipients who had been arrested at least once in the study period for drug-or alcohol-related offenses, no difference was found in average monthly medical and CD treatment expenses between the treated and untreated groups.

#### *Admissions to SSI Cost Offset Pilot Project*

For about three years prior to the onset of the project in November 1999, admissions of SSI clients to CD treatment programs, including inpatient, outpatient, and methadone treatment, remained relatively stable, averaging 136 admissions per month over a 34-month period from January 1997 through October 1999. After the pilot project began, admissions rose gradually to a peak in the summer of 2000. From May to August 2000, admissions of SSI recipients averaged 186 per month, 50 more than the earlier 34-month average. After that admissions turned slightly downward to settle around 160 per month. Overall, admissions averaged 166 per month during 2000, an increase of roughly 30 new admissions each month relative to the 34-month average before the pilot project began. Based on the annual average, an estimated 360 additional SSI recipients were admitted to CD treatment in the first year of the pilot project who, presumably, would not have been admitted without the added funds and local efforts afforded by this project.<sup>3</sup>

#### *Potential Medical Cost Savings*

Potential annual savings in avoided medical costs that may occur if more SSI clients receive treatment for chemical dependency depend not only on the cost differential between the treated and untreated groups (estimated at \$540 per person per month), but also on the number of additional SSI clients who receive treatment. Two estimates of additional SSI clients who may receive treatment have been considered: (1) 30 extra admissions which reflects the difference between average admissions in 2000 compared to admissions for 34 months just before the Cost Offset Project began and (2) 40 extra admissions which represents a number halfway between the average extra admissions for the year and for the four peak months. If an additional 30 SSI clients were admitted to chemical dependency treatment each month (360 per year), then the potential annual medical cost saving could total \$2.3 million. If an extra 40 clients were admitted to treatment monthly (480 per year), the potential cost savings would be \$3.1 million.

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<sup>3</sup> November and December 1999 were excluded from both the calculations of average monthly admissions since these two months constituted a start-up period for the project.



## 2 *Methods*

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### *Selection of Target Population*

The population included in the cost analysis were adults aged 18 years or older who were SSI recipients from July 1998 through August 2000. The Research and Data Analysis Division's Client Services Database (CSDB) served as an efficient source for identifying eligible clients, finding their unique identifiers, and linking them to other DSHS information systems. Since CSDB begins with records for July 1998, our beginning date of eligibility was set to this date as well.

In addition to a period of eligibility for SSI benefits, a second criteria for including SSI recipients in this study was the occurrence of medical or AOD treatment records in either the Medicaid Management Information System (MMIS) or the Division of Alcohol and Substance Abuse (DASA) Treatment Assessment Report Generation Tool (TARGET) any time from July 1997 through December 2000.<sup>4</sup>

### *Medical and Chemical Dependency Treatment Costs*

Medical costs for SSI recipients are paid on a fee-for-service basis. Therefore, detailed records of their medical expenses were available from MMIS. The types of services for which Medicaid-paid claims are recorded in MMIS include inpatient and outpatient hospitalizations, physician services, emergency room visits, prescription drugs, dental care, optical care, laboratory tests, medically required ambulance services, skilled nursing home care, stays in intermediate care facilities, and various other forms of medical services.

MMIS, however, does not contain records of certain Medicaid-paid services which are paid for through other means, including the Social Services Payment System, Regional Support Networks for community mental health services, and disproportionate share payments to state mental hospitals. The types of services for which payment records are not in MMIS include: state psychiatric hospitalizations, community outpatient mental health care, some stays in community residential facilities (e.g., adult family homes, boarding homes), personal care services, and AOD treatment in certain facilities. Except for AOD treatment services, we did not attempt to determine the cost for Medicaid-paid services which were not recorded in MMIS.

Treatment for drug and alcohol dependence provided through certain facilities is paid by contract rather than on a fee-for-service basis through Medicaid. Specifically, facilities

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<sup>4</sup> The criteria for identifying SSI clients to include in this study include two partially overlapping time periods: (1) eligibility for SSI—July 1998-August 2000 and (2) records of receipt of medical or AOD treatment—July 1997-June 2000. Therefore, counts of SSI recipients included in this report are not likely to correspond directly to other possible official reports of the number of SSI clients. Official counts of SSI recipients generally would not include the second criteria for selection that was needed for this study of medical and treatment costs.

classified as Institutions for Mental Disease (IMD) are contracted to provide AOD treatment to publicly supported clients. Payments are made through contractual arrangements managed by county drug and alcohol coordinators. Records of treatment provided by these facilities were obtained from the Division of Alcohol and Substance Abuse (DASA) Treatment Assessment Report Generation Tool (TARGET), which has detailed service information, but no data on costs. Therefore, the costs associated with treatment recorded in TARGET were estimated using unit costs provided by DASA (see Appendix B).

In general, all publicly funded treatment services are supposed to be recorded in TARGET but some episodes, particularly AOD treatment in hospitals, are not recorded in TARGET. Outpatient treatment, however, is usually recorded in both systems. Therefore, individual treatment periods were matched across the two systems and costs were taken from MMIS rather than estimated from TARGET whenever overlap was found. This method avoids double counting of costs where treatment is recorded in both systems.

To establish a baseline for examining costs before treatment, records from MMIS and TARGET were obtained for one year prior to the beginning of the eligibility period. Thus, medical costs and treatment expenditures were examined over 42 months: July 1997 through December 2000.<sup>5</sup>

#### *Need for Treatment*

SSI clients' need for AOD treatment was determined by the first administrative record of any of the following events or activities between July 1997 and December 2000:

- Medical records – Medical diagnoses (ICD-9CMs), DRGs, procedure codes (including detoxification), and revenue codes. *Source: MMIS (See Appendix C for list.)*
- Treatment records – Admissions to inpatient or outpatient AOD treatment and detoxification. *Source: MMIS and TARGET*
- Arrest records – Arrests within Washington State for drug- or alcohol-related offenses for which the arrestee was fingerprinted and the record was sent to the Washington State Patrol. *Source: Washington State Patrol, (See Appendix D for list.)*

In addition to the above criteria, the research that gave rise to this project (Kohlenberg et al. 1999) also used assessments for drug or alcohol treatment to identify potential need for treatment. This additional indicator of potential need for treatment was not included in the present analyses since a person who has an assessment for chemical dependency may not actually be found to need treatment and the outcome of each assessment is not

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<sup>5</sup> Since the MMIS extraction occurred in May 2001, payment records were considered sufficiently complete through December 2000 to be used for analysis purposes. Since medical payment records tend to lag and those submitted and paid soon after treatment may not be equally representative of all clients, Medicaid claims for services provided after December 2000 were excluded from these analyses.



recorded in TARGET. Most of the individuals who receive an assessment will be identified in this study as needing treatment through one of the methods described above, but a few may be missed by the more conservative approach used in this study.

Arrest records were used to identify need for treatment in the earlier project by Kohlenberg et al. (1999) and have been added to the analyses reported in this progress report. These records, however, were not available for a preliminary version of these analyses released in draft early in 2001 (Estee and Nordlund 2001). An additional 1,356 SSI recipients were identified as needing treatment based on arrest records alone.

### *Comparison Groups*

Three groups were identified for analyses of cost offsets:

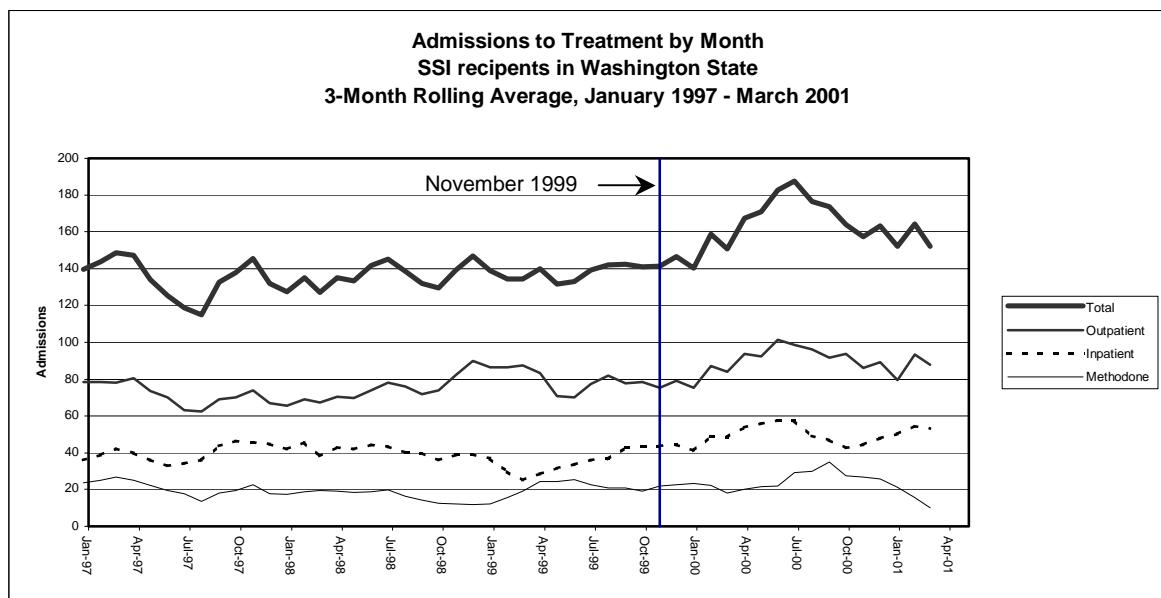
- (1) Treated – SSI clients who received AOD treatment at any time between July 1997 and December 2000. Treatment modalities included inpatient residential stays, outpatient care, and methadone maintenance. In addition, we counted a client in the “treated” category if they received AOD counseling. Detoxification was not counted as a form of AOD treatment, even though it was considered as an indicator of need for treatment.
- (2) Untreated – SSI clients were classified as “untreated” if they needed treatment (as described in the section “Need for Treatment” above) but did not receive any publicly funded AOD treatment between July 1997 and December 2000. (Note: Clients who received detoxification but did not receive AOD inpatient or outpatient care were left in the “untreated” category.)
- (3) No Need – SSI clients who did not evidence a need for AOD treatment between July 1997 and December 2000 based on the criteria described above.



### 3 Analyses

*Did admissions to AOD treatment increase after the pilot project began?*

Admissions of SSI clients to treatment services increased after the SSI Cost Offset Pilot project was implemented in November 1999. Admissions to chemical dependency treatment averaged 136 per month from January 1997 through October 1999.<sup>6</sup> After the start of the SSI Cost Offset Pilot Project in November 1999, which made additional funds available for treating SSI clients and supported higher referral rates, admissions of SSI clients to AOD treatment rose gradually beginning early in 2000, reached a peak in summer months, and then declined in the last half of the year. From May through August, four of the highest consecutive months, admissions averaged 186 per month, 50 more than the 34-month average before the pilot project began. In calendar year 2000, monthly admissions averaged 166, an increase of 30 admissions each month compared to the prior 34-month average.



*How many SSI Clients needed AOD treatment?*

AOD treatment was needed by 13 percent of 103,937 adults who received SSI benefits during some period from July 1997 through December 2000. The length of time each client was eligible for SSI during the 42-month study period varied. Sixty-eight percent were eligible for the entire 42 month period, while nearly all of the clients (98 percent) were eligible for at least 12 months. Overall the SSI recipients were eligible an average of 37 out of the 42 months. Therefore, the 13 percent estimated rate of need for treatment is based on events (e.g., medical diagnoses, detoxification, arrests) that occurred during

<sup>6</sup> Three-month rolling averages were used to smooth monthly variations so that long-term trends could be more readily discerned.

this study period. As a result, this rate is likely to be higher than need-for-treatment rates based on a year's worth of data. For example, for FY 1992, Kohlenberg et al. (1999) found 9 percent of SSI clients of working ages (18 – 64 years) needed treatment. For FY 1999 and 2000, limiting our analyses to the same age group, we also found 9 percent in need of treatment each year, even though, unlike the Kohlenberg study, we did not include assessments for substance abuse as a criteria of need for treatment.

Table 1  
Treatment Rates for SSI Recipients by Gender, Race/Ethnicity, and Age

	Treated		Untreated		Total
	n	%	n	%	n
Total	5,200	38	8,538	62	13,738
Gender					
Female	2,389	40	3,548	60	5,937
Male	2,811	36	4,990	64	7,801
Race/Ethnicity					
African American	624	39	972	61	1,596
Asian	72	40	109	60	181
Native American	278	35	516	65	794
Hispanic	160	38	257	62	417
White	3,866	38	6,341	62	10,207
Other	200	37	343	63	543
Age					
Younger	3,574	41	5,061	59	8,635
18-24	362	35	673	65	1,035
25-44	3,212	42	4,388	58	7,600
Older	1,626	32	3,477	68	5,103
45-64	1,561	33	3,185	67	4,746
65+	65	18	292	82	357

Note: Percents are row-wise, such that the number of treated (or untreated) clients is divided by the total number in need of treatment within each demographic category (e.g., Female, African American, etc.).

#### *How many SSI Recipients who needed AOD Treatment got it?*

Of the 13,738 SSI recipients who needed AOD treatment, 38 percent got it and 62 percent did not. Thus, 5,200 received AOD treatment while 8,538 did not despite their

apparent need. These rates are based on at least one admission to treatment in the 42 months between July 1997 and December 2000.

Using just one year of administrative data, Kohlenberg et al. (1999) found that 47 percent of SSI recipients aged 18 to 64 who needed AOD treatment were admitted during FY 1992. Treatment penetration rates in FY 1999 and 2000 for SSI clients aged 18-64 were somewhat lower: 38 and 41 percent, respectively.

Women were somewhat more likely to have received treatment than men: 40 percent of women who needed treatment got it while only 36 percent of men did so. This difference might reflect priorities placed on treating pregnant or postpartum women or a gender-based difference in willingness to seek treatment.

Most of the racial and ethnic groups had treatment penetration rates above 37 percent. The lowest rate was among Native Americans (35 percent), while Asians and African Americans were highest (40 and 39 percent, respectively).

With an AOD treatment penetration rate of only 18 percent, SSI recipients who were 65 years of age or older were the least likely age group to receive treatment for chemical dependency when needed. Those aged 25 to 44 had the highest rate with 42 percent of those in need of treatment getting it.

*What are the demographic characteristics of the SSI population?*

The treated and untreated groups were fairly similar in composition by race as shown in Table 2. About three-quarters (74 percent) of each group were white, 11 to 12 percent were African American, five to six percent Native American, three percent Hispanic, and one percent Asian. In contrast, the 89,328 SSI clients who did not appear to need AOD treatment were less likely to be white (69 percent), African American (six percent), or Native American (two percent) but were considerably more likely to be Asian (11 percent) than either the treated or the untreated group.

Males comprised slightly over half (54 percent) of the treated group and a somewhat higher proportion (58 percent) of the untreated group. Of the SSI clients who appeared to have no need for AOD treatment, only 38 percent were male.

The treated group tended to be younger than the untreated group. Persons aged 25 to 44 years predominated in the treated group (62 percent) but made up just over half of the untreated group (51 percent) while persons aged 45 or older comprised only 31 percent of the treated group and 41 percent of the untreated. The SSI recipients who had no apparent need for AOD treatment appeared to be a generally older population with 64 percent 45 years or more, many of whom were in the oldest age category (65+).

In the earlier study of all DSHS clients, Kohlenberg et al. (1999) found sufficient differences between the treated and untreated groups along all three demographic dimensions—age, sex, and race—to merit including these personal characteristics as statistical controls in their analyses of costs. Following their example, we will use a

statistical model that includes these possible sources of variation in explaining potential medical cost differences between the treated and untreated groups.

Table 2  
Demographic Characteristics of SSI Recipients in Three Groups  
Treated, Untreated, and No Need for Treatment

	Treated		Untreated		No Need	
	n	%	n	%	n	%
Total	5,200	100	8,538	100	89,328	100
Gender						
Female	2,389	46	3,548	42	55,062	62
Male	2,811	54	4,990	58	34,266	38
Race/Ethnicity						
African American	624	12	972	11	4,968	6
Asian	72	1	109	1	9,997	11
Native American	278	5	516	6	1,986	2
Hispanic	160	3	257	3	3,508	4
White	3,866	74	6,341	74	61,504	69
Other	200	4	343	4	7,365	8
Age						
18-24	362	7	673	8	5,687	6
25-44	3,212	62	4,388	51	26,462	30
45-64	1,561	30	3,185	37	32,390	36
65+	65	1	292	4	24,785	28

Note: Percents are column-wise and are calculated separately for each demographic characteristic within each of the three comparison groups (treated, untreated, no need).

## 4 Comparison of Medical Costs

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### *How were pre- and post-periods defined?*

To analyze differences in monthly medical costs between SSI clients who received AOD treatment and those who needed such treatment but did not get it, each person's medical (and CD treatment) expenses were divided into before and after periods based on when the need for treatment was identified. To establish a base of comparison, the total period of SSI eligibility for those who did not appear to need AOD treatment was divided into two equal parts. The pre- and post-event periods were defined for each of the three groups—treated, untreated, and no need—as follows:

- **Treated and Untreated who needed AOD treatment** – The first month in the 42-month study period in which a need for AOD treatment was identified was used to define the pre- and post-event periods. Specifically, the “before” period included all months in which a person was eligible for SSI before a need for AOD treatment was noted in their administrative record. The “after” period could include the month in which the need for AOD treatment was first identified and any subsequent months in which the person was eligible for SSI. As discussed previously, the indicators of need include medical diagnoses, medical procedures, revenue codes, detoxification, AOD treatment, or arrests for drug- or alcohol-related offenses. (See Appendices C and D for complete lists.)
- **No Need** – The overall period between the first and last month in which the client was reported as eligible for SSI benefits during the 42-month study period was divided into two equal parts for each person.

To ensure that there was an opportunity to incur medical expenses both before and after the need for treatment was identified, clients were included in the analyses only if they had at least one month of SSI eligibility in both the before and after periods. Out of all SSI recipients who needed AOD treatment during the study period, 11,104 (81 percent of the 13,738 recipients) met this criteria in order to be included in the cost offset analyses. In the treated group, 3,628 (70 percent of the overall 5,200 treated clients) met the inclusion criteria, and in the untreated group, 7,476 (88 percent of the 8,538 untreated) met the criteria. A lower proportion of the treated subgroup met this criteria because a portion of this population were in AOD treatment in either July 1997 or in their first month of SSI eligibility between July 1997 and December 2000.

The numbers of months included in the pre- and post-periods, as represented by means, standard deviations, minimum, and maximum values, are shown in Table 3. Those who received AOD treatment have the shortest pre-event period of the three groups, averaging 12.0 months. The post-need for treatment period (which included the time in which AOD treatment was received) covered an average of 25.6 months. The untreated group averaged about 15.1 months of eligibility before identification of a need for AOD treatment and 20.7 months in their follow-up period. For those who had no indication of

need for AOD treatment, their period of receiving medical services was divided on average into about 18.5 months during the pre-period and 18.6 months in the post-period.

Table 3  
Number of Months in Pre- and Post- Periods for SSI Recipients  
July 1997 - December 2000<sup>a</sup>

	Treated (n=3,628)		Untreated (n=7,476)		No Need (n=89,324)	
	Pre	Post	Pre	Post	Pre	Post
Mean # of Months	12.0	25.6	15.1	20.7	18.5	18.6
Standard Deviation	10.0	10.9	11.1	11.6	4.7	4.5
Minimum	1	1	1	1	1	1
Maximum	41	41	41	41	21	21

<sup>a</sup>Includes only cases with at least one month on SSI/Medicaid in the pre and post periods. Medical Costs equal Medicaid payments plus estimated chemical dependency treatment costs.

#### *How were Medicaid and chemical dependency treatment costs measured?*

Medicaid costs were based on expenditures recorded in MMIS for each SSI recipient, and these were allocated into the pre- and post-event periods as described above. For the treated group, estimates of chemical dependency treatment costs which were derived from TARGET service records were also included in the post-need for treatment period. Monthly averages were computed during the pre- and post-event periods by dividing total Medicaid payments and, where appropriate, estimated CD treatment costs in the specified period by the number of months the client was eligible for Medicaid under SSI in the same period.

Due to the importance of the number of months of eligibility for receiving publicly funded medical care in calculating average medical and chemical dependency treatment costs, care was exercised in determining the eligibility period. First of all, the months of eligibility for each SSI client were extracted from the Medicaid Client Eligibility File, which is maintained by the Office of Financial Management (OFM) based on DSHS records. Since SSI recipients are not eligible for Medicaid while they are incarcerated, periods of eligibility were adjusted by removing months in which the person was incarcerated, as recorded in the Department of Corrections' information system.<sup>7</sup> The only exception to this process was to retain months in which an incarceration began or ended and a Medicaid payment was made. Finally, SSI records were linked to those from the Department of Health's death registration system so that eligibility periods did not inadvertently include any months after a person had died.

<sup>7</sup> Department of Corrections' records do not include periods of incarceration in local jails.



Since analyses were going to examine change in costs over time, expenses were adjusted to account for changes in the cost of living between June 1997 and December 2000. In particular, each month's expenses were adjusted using the state's consumer price index (CPI) so that all costs are expressed in constant December 2000 dollars. It is possible that medical costs may have risen faster than the overall CPI. Therefore, changes in average monthly medical costs of the SSI recipients who had no need for AOD treatment can be used as a baseline for comparisons of changes shown for the treated and untreated groups.

*Did medical costs differ in the pre- and post-event periods?*

Average medical costs differed between the three groups in the pre- and post-event periods. The medical costs for the group that did not need CD treatment increased from approximately \$453 in the first half of each client's eligibility span to \$525 in the latter half, a modest increase of \$72 per person per month. Since these figures are in constant December 2000 dollars, this increase suggests a growth in their medical expenses due to either general worsening of their medical conditions over time or rises in medical costs over and above inflation.

Table 4  
Average Medical Costs in Pre- and Post- Event Periods for SSI Recipients  
July 1997 - December 2000<sup>a</sup>

	Treated		Untreated		No Need	
	Pre	Post	Pre	Post	Pre	Post
Mean Medical Costs	\$387	\$740	\$648	\$1,445	\$453	\$525
Standard Deviation	\$1,026	\$1,056	\$2,061	\$3,390	\$1,278	\$1,280
Maximum Costs	\$36,725	\$15,911	\$95,145	\$68,525	\$116,339	\$85,874

<sup>a</sup>Includes only cases with at least one month on SSI/Medicaid in the pre and post periods. Medical Costs equal Medicaid payments plus estimated chemical dependency treatment costs.

For both the treated and untreated groups their costs after need for AOD treatment was identified were higher than their medical costs before that seminal event. For those who received AOD treatment, their monthly medical costs averaged \$387 before their need for treatment was identified while their medical and CD treatment costs averaged \$740 afterwards, an increase of \$353. For the untreated group, which needed but did not receive AOD treatment, average monthly medical costs rose precipitously from \$648 before their need for treatment was identified to \$1,445 afterwards, a rise of \$797.

Before their need for AOD treatment was identified, those who later received treatment cost \$387 per month compared to \$648 for those who remained untreated, a statistically significant difference of \$261 ( $p < 0.0001$ ). This finding indicates that the untreated group differs from the outset from the treated group in their use of medical services. To account for these differences, medical costs before the need for treatment was identified

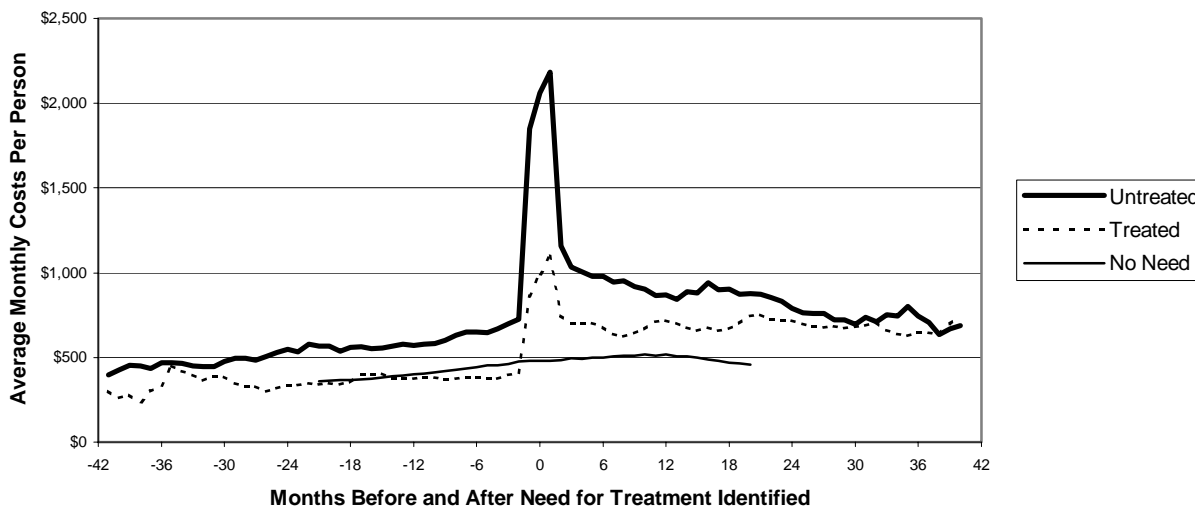
were included in the regression equation to estimate the contribution of AOD treatment on subsequent cost differentials.

After their need for AOD treatment was identified, medical and CD treatment costs for the treated group averaged \$740 per month compared to \$1,445 for the medical expenses alone of the untreated group, an unadjusted difference of \$705. A regression equation was developed (discussed below) to estimate the cost differences between these two groups once the contribution of demographic characteristics and before AOD treatment need costs are taken into account.

*Did receiving AOD treatment offset medical costs?*

Once their need for AOD treatment was identified, average monthly medical and CD treatment costs for those who received this treatment were \$540 less per month than the medical costs of SSI clients who needed but did not receive AOD treatment. As shown in the accompanying graph, these monthly cost differences may partially reflect a spike in medical costs for the untreated group in the month in which their need for AOD treatment was identified (shown as month “0” below).

**Average Monthly Medical and Chemical Dependency Treatment Costs  
Before and After Need for Treatment Identified  
Washington State SSI Recipients, July 1997 - December 2000  
(3-Month Rolling Averages)**



Although the group that later received AOD treatment also had a rise in medical costs in month 0, when their need for AOD treatment was first recorded, their spike in costs was much lower. In the months after their need for treatment was recorded, the untreated

group continued to have higher medical costs on a month-to-month basis for about two years. Around that point, costs for the two groups appear to converge.<sup>8</sup>

The results of the regression equation used to determine the degree to which medical costs differed between the treated and untreated groups are shown in Table 5. In addition to the receipt of AOD treatment, the equation included differences in average monthly costs before the need for treatment was identified and several demographic variables (gender, age, and race/ethnicity). The variables that contributed significantly to explaining cost differences between the treated and untreated groups, after the need for treatment was identified, were age 45 and over, pre-need-for-treatment medical costs, and receiving AOD treatment.

Thus, the contribution of the significant variables may be summarized as:

- gender – female SSI recipients cost \$106 more on average per month than males,
- age – SSI recipients who were 45 years of age or older cost \$624 more on average per month than those aged 18-44 years,
- pre-need for treatment costs – higher medical costs before a need for treatment was identified were associated with higher costs (36 cents per dollar per month) afterwards when AOD treatment, age, sex, and race were taken into account, and
- receipt of AOD treatment – average monthly medical and chemical dependency treatment expenses of those who received AOD treatment were \$540 less per person per month than the medical costs of those who needed AOD treatment but did not get it.

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<sup>8</sup> Since the study spanned the 42 months from July 1997 through December 2000, SSI recipients whose need for treatment was identified early in this period could have a minimum of one month in the pre-event period and up to 41 months in the post period. Similarly, clients whose need was identified late in the study period could have a long pre period and a short post period. Averages in the outlying months are based on smaller numbers of SSI clients than those reflected near the center of the distribution. Both the n's and the standard deviations were reviewed to ensure that the averages shown at the ends of the distribution remain statistically reliable.

Table 5  
Regression Predicting Medical Cost Offsets Associated with Receiving  
Alcohol or Drug Abuse (AOD) Treatment<sup>a</sup>

Parameter	DF	Estimate	Standard Error	Wald 95% Confidence Limits		Chi-Square	p value
Intercept	1	\$915	\$49	\$819	\$1,010	349.05	<.0001
Gender							
<b>Female</b>	<b>1</b>	<b>\$106</b>	<b>\$53</b>	<b>\$3</b>	<b>\$210</b>	<b>4.05</b>	<b>0.0443</b>
Male	0	\$0	\$0	\$0	\$0	.	.
Race							
African American	1	\$19	\$83	(\$143)	\$182	0.05	0.8168
Asian	1	(\$112)	\$227	(\$556)	\$332	0.25	0.6203
Hispanic	1	(\$61)	\$153	(\$362)	\$239	0.16	0.6893
Native American	1	\$36	\$111	(\$181)	\$253	0.11	0.7456
Other	1	(\$138)	\$135	(\$404)	\$127	1.05	0.3065
White	0	\$0	\$0	\$0	\$0	.	.
Age							
18-44	0	\$0	\$0	\$0	\$0	.	.
<b>45+</b>	<b>1</b>	<b>\$624</b>	<b>\$55</b>	<b>\$517</b>	<b>\$731</b>	<b>130.12</b>	<b>&lt;.0001</b>
<b>Pre-Need for Tx Costs</b>	<b>1</b>	<b>\$0.36</b>	<b>\$0.015</b>	<b>\$0.33</b>	<b>\$0.39</b>	<b>611.07</b>	<b>&lt;.0001</b>
<b>Received AOD Treatment</b>	<b>1</b>	<b>(\$540)</b>	<b>\$56</b>	<b>(\$650)</b>	<b>(\$430)</b>	<b>92.18</b>	<b>&lt;.0001</b>

<sup>a</sup>Includes only cases with at least one month on SSI/Medicaid in the pre and post periods. Medical Costs equal Medicaid payments plus estimated chemical dependency treatment costs.

Note: Significant variables, shown in bold, are: Recipient's age group 45+ (relative to 18-44), average monthly pre-need for treatment medical costs, and receipt of AOD treatment.

#### *How do medical cost offsets associated with AOD treatment vary among subgroups?*

The differences in costs that appear to be associated with receiving AOD treatment are not uniformly distributed among the SSI recipients in need of such treatment. Specifically, the cost offsets are higher among older recipients, those who were not arrested for drug- or alcohol-related offenses, and those who were only eligible for Medicaid (and not Medicare).

The cost offset was \$931 among older (45 years or older) SSI recipients compared to \$351 for younger ones (18-44 years). This finding, however, does not negate the potential long-term savings of successfully treating younger people who are chemically dependent. It suggests instead that among those who need treatment but do not get it, medical conditions may worsen with age and cause considerable expense if the person's AOD problems are left untreated.

One out of four of the SSI recipients who were identified as needing treatment had been arrested for serious drug or alcohol related offenses during the 3 ½ year study period. Of the 2,667 arrestees who met the criteria for inclusion in the cost offset analyses, 33 percent of these individuals received treatment for their chemical dependency, and some of those who were untreated met a medical condition (e.g., diagnoses, procedure, detoxification) that indicated a need for treatment.<sup>9</sup> Among these arrestees, however, there were no cost offsets associated with receiving treatment through publicly funded programs outside of the criminal justice system. In contrast, among the 8,437 SSI recipients who had not been arrested during this period but who needed treatment based on some medical criteria, the cost difference between the treated and untreated groups amounted to \$739 per person per month.

Table 6  
Differences in Average Monthly Medical Cost Offsets Associated with Treatment Using Medical and Criminal Criteria for Identification of Need for Treatment

Group	Study Population	Number		Tx Rate	Number Untreated	Total	Adjusted Avg Mo. Medical Cost Offset <sup>a</sup>
		Treated					
A	Medical + Criminal Criteria	3,628		33%	7,476	11,104	-\$540
Subsets of Group A:							
B	Younger: 18-44 years	2,573		37%	4,427	7,000	-\$351
C	Older: 45+ years	1,055		26%	3,049	4,104	-\$931
D	Arrestees	868		33%	1,799	2,667	\$67 <sup>b</sup>
E	Non-Arrestees	2,760		33%	5,677	8,437	-\$739
F	Dual Eligibles	1,100		35%	2,068	3,168	-\$108
G	Medicaid Only	2,528		32%	5,408	7,936	-\$704

<sup>a</sup>Medical Costs include Medicaid payments and estimated chemical dependency treatment costs.

<sup>b</sup>Non-significant difference.

About 29 percent of the SSI recipients included in the cost offset analyses who were identified as needing AOD treatment were eligible for both Medicaid and Medicare. For these people, the portion of their medical expenses paid for by Medicare are not recorded in MMIS. Therefore, our analyses pertain only to the Medicaid portion of their medical costs plus any estimated expenses for publicly funded AOD treatment recorded in TARGET. For SSI recipients who are dual eligibles (i.e., eligible for both Medicaid and Medicare), a small but significant cost offset was found for their Medicaid and AOD

<sup>9</sup> Of the 2,667 arrestees included in the cost offset analyses, 1,130 were identified as needing AOD treatment based on an arrest record alone; the remainder met one or more medical criteria of need.

treatment expenses. Specifically, the Medicaid portion of their medical expenditures were \$108 lower for dual eligible SSI recipients who were treated for their chemical dependency than for those who were not. In contrast, when the expenses for the 7,936 SSI recipients who were only eligible for Medicaid were examined, a much higher cost offset of \$704 was found.

## *5 Future Directions*

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One of the most remarkable features of the cost offset analyses in this report is the exceptionally high Medicaid costs in the months immediately after the need for AOD treatment was identified, particularly among the SSI recipients who did not receive AOD treatment. Further analyses will be conducted to learn more about the types of the medical treatments involved in these costs. The striking peak in those expenses raises the question as to whether some of these costs could have been avoided if the clients' need for AOD treatment had been identified and addressed earlier. This may be a population that could benefit from early screening and diagnosis followed by treatment for their chemical dependency.

We plan to analyze the diagnoses of the treated and untreated populations to provide more information about how the two groups differ and to see if these differences suggest possible reasons for why the untreated group either does not seek or is not provided CD treatment. Since chemical dependency is no longer a criteria for eligibility for SSI benefits, all SSI recipients must have some other diagnosis. Further work is needed to uncover the other forms of disabilities that these clients have and whether these differ between the treated and the untreated group. For example, we have already linked the data to records from the DSHS Mental Health Division and plan to examine the degree of co-morbidity with mental health problems. We will also examine the diagnoses recorded in MMIS to describe differences between the treated and untreated groups before their need for AOD treatment was identified and afterwards.

Other analyses will focus on outcomes besides medical expenses that may be associated with AOD treatment. For example, preliminary analyses reveal that the untreated group has a higher death rate than those who receive treatment. More work is needed to examine the age at death, timing after need for treatment is identified, causes of death, and medical costs prior to death. Presumably, earlier treatment for chemical dependency might have prevented some of these deaths.

We do not yet understand why there were no medical cost offsets associated with treatment within the arrestee population. In future analyses we will examine this subgroup to try to discover why there appear to be no effects of receiving AOD treatment on medical costs for this group and to determine if there are other possible outcomes, such as reduced subsequent criminal behavior and associated criminal justice costs for those who receive AOD treatment.

The SSI Cost Offset Pilot Project will continue to provide additional funding for treating SSI clients with drug and alcohol abuse problems through June 2003. The evaluation of outcomes associated with providing CD treatment to any SSI recipient will continue through this same period, and results will be presented in subsequent reports. Future analyses will include an investigation into differences between the treated and untreated groups in terms of types of medical expenses before and after the need for AOD

treatment is identified; co-morbidity with mental illness or medical conditions; death rates and causes of death; and criminal justice outcomes. In addition to these more in-depth analyses, future reports will also include updates of the information contained in this report. We will continue to examine trends in admissions and AOD treatment rates for SSI recipients and to determine if medical cost offsets persist over time.



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# *Appendix A*

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## **Project Implementation**

### *Funding*

For the 1999-2001 biennium, the SSI Cost Offset Pilot Project was supported with \$2.5 million in funds, including \$1 million in federal Title XIX match. The total funds were split equally between the two fiscal years. The funds covered residential treatment services, outpatient treatment, client transportation costs, and an evaluation of project outcomes.

### *Participating Counties*

Sixteen counties agreed to participate in the pilot project. These counties represent the majority of SSI clients in Washington State, since 90 percent of all state residents who are eligible for SSI live in these counties. The counties are:

Benton County	Lewis County
Clallam County	Pierce County
Clark County	Skagit County
Cowlitz County	Snohomish County
Grant County	Spokane County
Grays Harbor County	Thurston County
King County	Whatcom County
Kitsap County	Yakima County

In the 16 counties, additional funds were made available to each county's chemical dependency treatment system so that SSI clients in those counties could be referred to any county-designated outpatient provider for an assessment. These providers would assist the client in accessing the appropriate level of outpatient or inpatient treatment. In the remaining 23 counties of the state, SSI clients continued to be eligible for regularly funded outpatient treatment.

Residential treatment capacity for SSI clients was expanded statewide. In all counties the ADATSA Assessment Center was able to refer SSI clients for residential treatment. In the 16 project counties, however, the outpatient treatment agency could refer clients directly to appropriate residential treatment.

### *Client Eligibility*

Only adult recipients of SSI assistance were eligible for the pilot project. Furthermore, use of pilot project funds was limited to a subset of SSI recipients depending on their usual source of income. In particular, SSI recipients were eligible for treatment using project funds if their medical identification cards were designated as S01. This Medicaid category pertains to SSI clients who receive monthly cash grants as their primary means

of support. SSI clients who had other sources of monetary support (e.g., Social Security disability, other pensions, spousal income) were not eligible for treatment funding through this project.

### *Services*

The treatment services provided under the pilot project do not represent a new type of service. Prior to the implementation of this project, an estimated 50 percent of SSI clients who needed chemical dependency treatment received it.<sup>10</sup> The project was designed to increase this proportion so that even more adult SSI clients who needed such treatment would get it. To accomplish this goal, the Division of Alcohol and Substance Abuse (DASA) worked with the County Alcohol and Drug Coordinators to expand outpatient service capacity in the participating counties and to broaden the client needs assessment and referral process.

One of the main strategies of this project was to strengthen working relationships between primary sources for referrals of SSI clients and local treatment agencies. The primary sources of referrals include major medical providers, Regional Support Networks (RSNs) and their mental health providers, and HIV/AIDS projects. Working together, DASA and the County Alcohol and Drug Coordinators took steps to gain the support and cooperation of the primary referral sources. This included letters and meetings providing the referral sources with a description of the pilot project and sufficient information so that the referring agencies would be able to:

- Screen clients for chemical dependency;
- Know how to refer clients for assessment and treatment;
- Coordinate services or provide case management to ensure continuity of care for clients; and
- Solve problems of cross-agency coordination, should they arise.

The County Drug and Alcohol Coordinators were asked to meet with local treatment agencies and referral sources to foster cooperation and communication and to determine if there were likely to be waiting periods for assessment or treatment. Anecdotal evidence from some of the County Drug and Alcohol Coordinators suggests that participation of primary referral sources varied from county to county. For example, in some counties RSNs actively referred SSI clients for chemical dependency treatment, while, in others, the RSN for that area was less active. As part of the final report on this project, the local processes used to elicit participation of primary referral sources and to foster cross-agency cooperation will be described for all project counties.

The referral process was implemented late in the calendar year 1999 once agreements between DASA and the County Alcohol and Drug Coordinators had been reached. Letters were sent to outpatient providers in each of the project counties and to directors of

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<sup>10</sup> Liz Kohlenberg, Lijian He, Bill Luchansky, Dario Longhi, and Boqing Wang. "Improve Outcomes and Reduce Government Costs by Increasing Alcohol/Drug Treatment for DSHS Clients," Washington State Department of Social and Health Services Research and Data Analysis, March 1999, Draft Report.

the Regional Support Networks in November and December 1999, respectively. These letters served to inform these treatment providers and referral sources of the full scope of the project and, effectively, served to mark the official implementation of the project. The County Alcohol and Drug Coordinators also met with the treatment providers and referral sources locally once these official DASA letters had been sent. Anecdotally, the county coordinators have indicated that local meetings and discussions around the referral and assessment process continued through the first quarter of 2000, so implementation dates may vary on a local basis.



## ***Appendix B***

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### **Unit Costs Used to Estimate Cost of Alcohol or Other Drug Treatment from TARGET**

#### **Residential Treatment and other costs based on daily rate**

	Daily Rate
1. II -Intensive inpatient (II)	\$ 61.55
2. LT -Long term residential (LT)	
PPW programs	98.59
non-PPW programs	48.45
3. MR -MICA Residential	78.23
4. EC -Extended Care Recovery House	28.18
5. RH -Recovery House	
PPW programs	85.73
non-PPW programs	35.22
6. DD -Dual Diagnosis – evaluation	84.68
7. DX -Detox	44.32

#### **Outpatient activity costs based on a per activity charge**

	Activity Charge
1. OP-I Individual	\$ 52.73
2. OP-G Group	4.15
3. OP-J Conjoint (with family)	52.73
4. OP-F Family (without client)	52.73
5. OP-C Childcare	12.00
6. OP-M Case Management	20.00
7. OP-A Acupuncture	52.73
8. OP-R Methadone dose change	9.61
9. OP-U Urinalysis sample	7.44





## Appendix C

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### **Codes Used to Identify Need for Alcohol or Other Drug Treatment from the Medicaid Management Information System (MMIS) and the Treatment Assessment Report Generation Tool (TARGET)**

This list is divided into two sections: NEED FOR TREATMENT INDICATORS and RECEIPT OF TREATMENT (SSI recipients who receive AOD treatment are also classified as needing treatment.)

#### **I. NEED FOR TREATMENT INDICATORS**

##### *A. ICD-9CM diagnosis codes (MMIS)*

*ICD-9CM codes beginning with:*

- 291       Alcoholic psychoses
- 292       Drug psychoses/withdrawal syndrome
- 303       Alcohol dependence
- 304       Drug dependence
- 305       Nondependent drug/alcohol abuse (excluding 305.1 for tobacco abuse)

*Specific ICD-9CM codes:*

- 571.1     Acute alcoholic hepatitis
- 648.3     Drug dependence complicating pregnancy

##### *B. Procedure Codes (MMIS)*

- 0010M     Drug abuse-intake evaluation
- 0011M     Drug abuse-physical exam
- 0017M     Drug abuse-urinalysis
- 0018M     Drug abuse - medication adjustment
- 0020M     Alcohol abuse outpatient/intake evaluate
- 0021M     Alcohol abuse outpatient - physical exam
- 0025M     Detox - hospital admit
- 0026M     Detox hospital follow-up call
- 0029M     DASA intensive case management epsdt
- 0141M     Adult intake processing subabusing DASA specific
- 0142M     Physical examination subabusing adult
- 0151M     Substance abuse pregnant/intake process (was eval)
- 0152M     Substance abuse pregnant/physical exam
- 0161M     Substance abuse epsdt youth intake processing
- 0162M     Substance abuse epsdt youth physical exam
- 0173M     Substance abuse targeted case management epsdt youth

0175M	DASA - adolescent residential treatment
0176M	DASA - residential trtmt room & board
0188M	DASA - therapeutic child care
09462	Alcohol detoxification
09465	Drug detoxification
09468	Combined alcohol & drug detoxification
2050M	DASA-youth detox stabilization sub acute
2051M	DASA - youth detox stabilization - acute
2151M	Chem depend intake processing - parenting women
2152M	Chem depend physical examination parenting women
2161M	Chem depend intake processing - non-espdt youth
2162M	Chem depend physical examination non-espdt youth
2170M	Chem depend assessment expanded - DCFS referred
2171M	Chem depend intake processing - DCFS referred
2172M	Chem depend physical examination DCFS referred

*C. Revenue codes (MMIS)*

116	Detoxification, room and board, private
126	Detoxification, room and board, semi-private (2 beds)
136	Detoxification, room and board, semi-private (3-4 beds)
146	Detoxification, room and board, private (deluxe)
156	Detoxification, room and board, ward
168	Chemically Using Pregnant Program (CUP)

*D. Modality of Treatment Admission (TARGET)*

DX	Detox
TH	Transitional housing

## **II. RECEIPT OF AOD TREATMENT**

*A. DRG codes (MMIS)*

433	Alcohol or drug abuse or dependence, left against medical advice
434	Alcohol or drug abuse or dependence, detox or other symptomatic treatment wcc (with complications)
435	Alcohol or drug abuse or dependence, detox or other symptomatic treatment w/o cc (without complications)
436	Alcohol or drug dependence, with rehabilitation therapy
437	Alcohol or drug dependence, detox and rehabilitation therapy
743	Opioid abuse or dependence, left against medical advice
744	Opioid abuse or dependence, wcc (with complications)
745	Opioid abuse or dependence, w/o cc (without complications)
746	Cocaine or other drug abuse or dependence, left against medical advice
747	Cocaine or other drug abuse or dependence, wcc (with complications)

748	Cocaine or other drug abuse or dependence, w/o cc (without complications)
749	Alcohol abuse or dependence, left against medical advice
750	Alcohol abuse or dependence, wcc (with complications)
751	Alcohol abuse or dependence, w/o cc (without complications)

*B. Procedure codes – Hospital Claims only (MMIS)*

96.61	Alcohol rehabilitation
96.63	Alcohol rehabilitation and detoxification
96.64	Drug rehabilitation
96.66	Drug rehabilitation and detoxification
96.67	Combined alcohol/drug rehabilitation
96.69	Combined alcohol/drug rehabilitation and detoxification

*C. Procedure Codes (MMIS)*

0012M	Drug abuse-individual therapy-full visit
0013M	Drug abuse-individual therapy-brief visi
0014M	Drug abuse-group therapy
0015M	Drug abuse-activity therapy
0016M	Drug abuse-chemotherapy
0022M	Alcohol abuse/individual therapy - full
0023M	Alcohol abuse individual therapy - brief
0024M	Alcohol abuse outpatient - group therapy
0027M	Medication adjustment
0143M	Individual therapy full visit subabusing adult
0144M	Individual therapy brief visit subabusing adult
0145M	Adult substance abuse op/group therapy,per hr.
0146M	Adult drug abuse outpatient/chemotherapy
0147M	Adult drug abuse op/medication adjustment
0148M	Adult drug abuse op/acupuncture
0149M	DASA - adult group therapy per 1/4 hour
0153M	Substance abuse pregnant/individual full
0154M	Substance abuse pregnant/individual brief
0155M	Sub abuse pregnant/group therapy,per hr.
0156M	Drug abuse op pregnant/chemotherapy
0157M	Drug abuse op pregnant/medication adjustment
0158M	Drug abuse op pregnant/acupuncture
0159M	DASA - pregnant group therapy per 1/4 hour
0163M	Substance abuse epsdt youth individual therap
0164M	Substance abuse epsdt youth indiv ther brief
0166M	Substance abuse epsdt youth chemotherapy
0167M	Substance abuse epsdt youth medication adjust
0168M	Substance abuse epsdt youth acupuncture
0169M	Substance abuse epsdt youth group ther 1/4 hr
0171M	DASA - youth enhanced recovery house
0172M	DASA - youth enhanced recovery house r&b

0177M	DASA - youth residential treatment-epsdt
0178M	DASA -youth residential treatment-level 1
0179M	DASA -youth residential trmt level ii-
0180M	FSPLUS long term residential
0181M	FSPLUS intensive inpatient
0182M	FSPLUS medical stabilization
0183M	DASA ppw long term residential treatment
0186M	FSPLUS DASA room and board
0190M	Opiate dependency treatment adult
0191M	Opiate dependency treatment pregnant postpartum
0192M	Opiate dependency treatment epsdt youth
09453	Referral alcohol rehab
09463	Alcohol rehabilitation & detoxification
09466	Drug rehabilitation & detoxification
09467	Combined alcohol & drug rehabilitation
09469	Combined alcohol & drug rehab and detox
2153M	Chem depend indiv therapy full visit parenting women
2154M	Chem depend indiv therapy brief visit parenting women
2159M	Chem depend group therapy parenting women
2163M	Chem depend indiv therapy full visit non-espdt youth
2164M	Chem depend indiv therapy brief visit non-espdt youth
2169M	Chem depend group therapy non-espdt youth
2173M	Chem depend indiv therapy full visit DCFS referred
2174M	Chem depend indiv therapy brief visit DCFS referred
2179M	Chem depend group therapy DCFS referred
2191M	Opiate dependency treatment parenting women
2192M	Opiate dependency treatment non-epsdt youth
9005M	Fed qual hlth ctr - chemical dependency
J1230	Inj methadone hcl up to 10 mg

*D. Modality of Treatment Admission (TARGET)*

II	Intensive inpatient
LT	Long-term residential
MR	MICA-residential
EC	Extended care
RH	Recovery house
VS	Variable stay residential
OP	Outpatient
IO	Intensive outpatient
MO	MICA-outpatient
MT	Methadone maintenance
GC	Group care
DD	Dual diagnosis

## Appendix D

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### Criminal Codes Used to Identify Need for Alcohol or Drug Treatment from Washington State Patrol Arrest Records

Crime Code	Description	RCW*	Class**
07200	Violation of the uniform legend drug act (VULDA)	69.41.020	U
07204	VULDA-obtain by fraud/forgery/false information	69.41.020	F
07206	VULDA-uttering forged prescription	69.41.020	F
07207	VULDA prescription requirements for legit medical purposes	69.41.040	F
07208	VULDA-sell or deliver	69.41.030	F
07209	VULDA-possession	69.41.030	M
07219	VULDA-labeling	69.41.050	M
07230	Precursor drug violation	69.43.000	U
07232	Precursor drug violation sale, transfer, furnish or receive for unlawful manufacture	69.43.070	B
07233	Precursor drug violation false statement in report or record	69.43.080	C
07236	Precursor drug violation fail to submit report	69.43.010(5)	G
07237	Precursor drug violation fail to report out-of-state source	69.43.020	G
07238	Precursor drug violation furnish or receive without a permit	69.43.090	G
07239	Precursor drug violation	69.43.010(4)	M
07300	Violation of the uniform controlled substances act (VUCSA)	69.50.401	U
07301	Controlled substance homicide: deliver substance resulting in death of user	69.50.415	B
07303	Involve a minor in a drug transaction	69.50.401(F)	C
07304	VUCSA-deliver heroin or narcotics to minor	69.50.401(A)(1)(I)	A
07306	VUCSA-deliver narcotics 3,4,5 or non narcotics 1-5 to minor	69.50.401(A)(1)	B
07307	VUCSA-sell heroin for profit prior conviction	69.50.410(1)	B
07308	VUCSA-sell heroin for profit	69.50.410(1)	C
07309	VUCSA - non felony	69.50.000	U
07310	VUCSA-felony violation of uniform controlled substance act	69.50.000	F
07311	VUCSA-deliver to a minor	69.50.401(A)(1)	F

07313	VUCSA-sell other than heroin for profit prior conviction	69.50.410(1)	B
07314	VUCSA-sell other than heroin for profit	69.50.410(1)	C
07315	VUCSA-manufacture/deliver schedule 1,2 narcotics prior conviction	69.50.401(A)(1)(I)	A
07316	VUCSA-manufacture/deliver schedule 1,2 narcotics	69.50.401(A)(1)(I)	B
07317	VUCSA-possess with intent schedule 1,2 narcotics prior conviction	69.50.401(A)(1)(I)	A
07318	VUCSA-possess with intent schedule 1,2 narcotics	69.50.401(A)(1)(I)	B
07321	VUCSA-sell for profit	69.50.410(1)	F
07323	VUCSA-manufacture/deliver schedule 1,2,3 non-narcotics prior conviction	69.50.401(A)(1)(II)	B
07324	VUCSA-manufacture/deliver schedule 1,2,3 non-narcotics	69.50.401(A)(1)(II)	C
07325	VUCSA-possess with intent schedule 1,2,3 non-narcotics prior conviction	69.50.401(A)(1)(II)	B
07326	VUCSA-possess with intent schedule 1,2,3 non-narcotics	69.50.401(A)(1)(II)	C
07327	VUCSA-manufacture/deliver schedule 4 prior conviction	69.50.401(A)(1)(III)	B
07328	VUCSA-manufacture/deliver schedule 4 narcotics	69.50.401(A)(1)(III)	C
07331	VUCSA-manufacture/deliver/possess with intent	69.50.401(A)(1)	F
07333	VUCSA-possess with intent schedule 4 prior conviction	69.50.401(A)(1)(III)	B
07334	VUCSA-possess with intent schedule 4	69.50.401(A)(1)(III)	C
07335	VUCSA-manufacture/deliver schedule 5 prior conviction	69.50.401(A)(1)(I)	B
07336	VUCSA-manufacture/deliver schedule 5	69.50.401(A)(1)(I)	C
07337	VUCSA-possess with intent schedule 5 prior conviction	69.50.401(A)(1)(I)	B
07338	VUCSA-possess with intent schedule 5	69.50.401(A)(1)(I)	C
07341	VUCSA-possess with intent	69.50.401(A)(1)	F
07343	VUCSA-manufacture/deliver/possess with intent marijuana prior conviction	69.50.401(A)(1)(II)	B
07344	Manufacture/deliver/possess with intent-marijuana	69.50.401(A)(1)	F
07345	VUCSA-possess heroin or schedule 1 or 2 non-narcotics prior conviction	69.50.401(D)	B
07346	VUCSA-possess heroin or schedule 1 or 2 non-narcotics	69.50.401(D)	C
07347	VUCSA-possess schedule 3-5 narcotics or non-narcotics prior conviction	69.50.401(D)	B
07348	VUCSA-possess schedule 3-5 narcotics or non-	69.50.401(D)	C

	narcotics		
07351	VUCSA-possess	69.50.401	F
07353	VUCSA-counterfeit sub schedule 1,2 narcotics prior conviction	69.50.401(B)(1)(I)	A
07354	VUCSA-counterfeit sub schedule 1,2 narcotics	69.50.401(B)(1)(I)	B
07355	VUCSA-counterfeit sub schedule 3 narcotics/schedule 1-3 non-narcotics prior	69.50.401(B)(1)(II)	B
07356	VUCSA-counterfeit sub schedule 3 narcotics/schedule 1-3 non-narcotics	69.50.401(B)(1)(II)	C
07358	VUCSA-liquid sub or material in lieu of a cont sub	69.50.401(C)	C
07359	VUCSA-possess marijuana 40 g. Or less prior conviction	69.50.401(E)	M
07361	VUCSA-possess without a prescription	69.50.401(D)	F
07363	VUCSA-possess without prescription schedule 1,2 prior conviction	69.50.401(D)	B
07364	VUCSA-possess without prescription schedule 1,2	69.50.401(D)	C
07365	VUCSA-possess without prescription schedule 3-4 or non-narcotics prior conviction	69.50.401(D)	B
07366	VUCSA-possess without prescription schedule 3-4 or non-narcotics	69.50.401(D)	C
07369	VUCSA-possess marijuana 40 g. Or less	69.50.401(E)	M
07370	VUCSA-possess marijuana unknown amount	69.50.401	U
07371	VUCSA-counterfeit substance	69.50.401(B)(1)	F
07373	VUCSA-obtain by fraud/false/forged prescription prior conviction	69.50.403(A)(3)	C
07374	VUCSA-obtain/attempt obtain by fraudulent/false/forged prescription	69.50.403(A)(3)	C
07375	VUCSA-utter forged prescription prior conviction	69.50.403(A)(5)	C
07376	VUCSA-utter forged prescription	69.50.403(A)(5)	C
07377	VUCSA-possess marijuana more than 40 g. prior conviction	69.50.401(D)	C
07378	VUCSA-possess marijuana more than 40 grams	69.50.401(D)	C
07379	Glue sniffing *recodified (refer to 007398)	9.47A.020	M
07381	VUCSA-false/forged/fraud/misrepresent	69.50.403	F
07383	Possess ephedrine, pseudoephedrine or anhydrous ammonia with intent to manufacture methamphetamine	69.50.440	F
07384	Use building for unlawful drugs	69.53.000	F
07385	Use building for unlawful drugs make available building for use	69.53.010	C
07386	Use building for unlawful drugs allow fortification of building	69.53.020	C
07387	Use building for unlawful drugs use fortified	69.53.030	C

	building		
07388	Maintain place/dwelling for selling/use cont	sub 69.50.402(A)(6)	C
07389	Drug paraphernalia	69.50.412	M
07390	Imitation controlled substance	69.52.000	U
07392	Imitation controlled substance distribute to a minor	69.52.030(2)	B
07394	Imitation controlled substance manufacture/distribute/possess with intent to distribute	69.52.030(1)	C
07396	Imitation controlled substance publication; post or dist advertisement or solicit	69.52.030(3)	C
07397	Drug paraphernalia - deliver to person under eighteen	69.50.412	G
07398	Inhale, possess, sale toxic fumes	9.47A.000	M
07399	Drug related charge	69.00.000	U
07644	Drive under the influence	46.61.502	G
07644	Drive while under the influence	46.61.502	G
07645	Drive or being in phys control u/21 after consuming alcohol	46.61.503	M
07646	Physical control being in actual physical control while intoxicated	46.61.504	G

\*RCW – Revised Code of Washington

\*\*Class:

- F – Felony
- A – Class A Felony
- B – Class B Felony
- C – Class C Felony
- U – Undifferentiated Felony
- G – Gross Misdemeanor
- M – Misdemeanor







**Research and Data Analysis Division**  
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