DASA/DCFS INITIATIVE: EVALUATION OF INTEGRATED SERVICES FOR SUBSTANCE ABUSING CLIENTS OF THE ILLINOIS PUBLIC CHILD WELFARE SYSTEM

Prepared for the **Illinois Department of Alcohol and Substance Abuse**
and the **Illinois Department of Children and Family Services**

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I. Background

Case workers in the public child welfare system in Illinois have long been aware that a large number of clients in their case loads are substance dependent. Data on the number of indicated reports of substance exposed infants reported by Illinois hospitals to the Illinois Department of Children and Family Services (DCFS) suggest parental substance use is a serious problem. These cases more than doubled from 1990 to 1994 from 1688 to 3481 (DCFS, 1995). Although the numbers of SEI allegations have dropped in 1996 and 1997, a recent prevalence analysis by the Illinois Department of Alcoholism and Substance Abuse (DASA) indicated significant substance use among DCFS parents (Bruni & Gillespie, 1996). Approximately 50% of DCFS clients had used cocaine in 1996. An overwhelming majority (81.5%) had used alcohol and at least one illicit drug at some point in their lives and one third of DCFS women who ever used one illicit drug reported using three: marijuana, cocaine and heroin. Nearly half of this sample met DSM-III-R criteria for substance abuse or dependence indicating a need for treatment. This study also indicated that among the DCFS clients, 21% reported using drugs in the presence of their children, 43% said they had been under the influence of drugs and alcohol while with their children and 49% said that drug use was the reason for their involvement with DCFS. This study indicated that 30% of women in the sample had some drug treatment in the last year (primarily self-help and outpatient). And it pointed to the desirability of more information about (a) the level of service needs of this DCFS population, and (b) the accessibility and effectiveness of services for substance abusing

women involved with DCFS. These areas: service needs, accessibility and effectiveness, are the focus of this report.

Concern about the incidence and prevalence of substance abuse among families working with the Department of Children and Family Services led the Illinois legislature to create in FY95 the Initiative program, a cooperative program between DASA and DCFS. Public Act 89-268 states that 'The Department of Alcoholism and Substance Abuse (DASA) and the Department of Children and Family Services (DCFS) shall develop a community-based system of integrated child welfare and substance abuse services for the purpose of providing safety and protection for children, improving adult health and parenting outcomes, and improving family outcomes.' Thus, the purpose of the program was to integrate the activities of two departments in order to provide accessible and effective substance abuse treatment to DCFS-involved women. The perception of service providers that appropriate substance abuse services were particularly limited for DCFS clients was a primary consideration leading to the development of the program (DASA/DCFS Advisory Group, personal communication November 1997). Service providers involved in designing the program were seeking to improve accessibility and build on research and program experience indicating that women benefit most from drug treatment programs that provide comprehensive services for meeting health and social needs such as transportation, child care and medical care (NIDA, 1995). Specifically, the Initiative programs provided women with four service enhancements meant to bring clients into treatment and break down barriers that can prevent women from succeeding in treatment:

- Transportation to and from treatment
- Outreach
- Child care
- Case management

And as specified in the legislation, these service enhancements were designed to achieve the following program goals:

- Reduce drug use
- Improve health outcomes of mothers
- Improve family and parenting outcomes (esp. provide for the safety and protection of children)

Currently, DASA (now the Office of Alcoholism and Substance Abuse (OASA) in the Illinois Department of Human Services) funds 54 programs statewide including 26 outpatient treatment programs (3 for youth, 23 for adults) 21 intensive outpatient programs, three social setting detoxification programs, two residential treatment programs, and two outpatient methadone programs. Thirteen outpatient programs were included in this study.

II. Evaluation Design and Implementation

This report is part of the evaluation of the implementation and effectiveness of the Initiative programs required by legislation. The report is based on a survey conducted by the University of Illinois Survey Research Laboratory of a randomly selected sample of DCFS-involved women in nine Initiative and three non-Initiative programs in Chicago and Rockford. A comparison group of DCFS- involved clients with some indication of substance dependency who were not known to be receiving substance abuse treatment was selected from a list of clients who had been reported to DCFS because of a substance-exposed infant (SEI) allegation. Sampling occurred between January 1997 and July 1997. Face-to-face interviews were conducted with 73 Initiative clients, 75 non-Initiative, or Regular clients, and 51 clients from the comparison group. Clients from the Initiative and Regular programs were interviewed at the program site. Comparison group

clients were interviewed at the Survey Research Lab offices in Chicago. The sampling procedure and response rate are summarized in Appendix A. The interviewers collected information about clients' substance use, service utilization, and the impact of services on substance use, health, family and parenting outcomes. Thus, the design of the study is a constructed comparison group design resulting in a comparison of the following three groups of women:

1. Initiative program clients: women who entered a drug or alcohol treatment program at an Initiative-funded site between July 1, 1995 and June 30, 1996 (n=73);

2. Regular program clients: women who entered a drug or alcohol treatment program at a non- Initiative-funded site between July 1, 1995 and June 30, 1996 (n=75); and

3. Comparison clients: women who gave birth to a substance-exposed infant (SEI) and had a family case opened by DCFS between July 1, 1995 and June 30, 1996 and who may or may not have sought treatment (n=51).

Groups 1 and 2 were developed as treatment groups and Group 3 was developed as a no-treatment group.

The survey data were analyzed and summarized by the University of Chicago School of Social Service Administration. The analysis addresses three questions:

- What are the characteristics of clients in the three groups?
- What are the characteristics of program participation and services received?
- What is the impact of the program on substance use, health, family and parenting outcomes?

III. Characteristics of Service Recipients

Research on drug-using women consistently shows that women in drug treatment programs are characterized by more risk factors related to dropping out of treatment and relapse than men in similar circumstances. Women in drug treatment often have lower levels of education and employment experience than men (Marsh & Miller, 1985). They often have more serious health and mental health problems (Marsh & Miller, 1985; NIDA, 1995). And they are often more isolated from supportive networks of family and friends (Marsh & Miller, 1985; NIDA, 1995).

Age, race, education and employment

As shown in Table 1, there were few differences across the three groups of women surveyed in this study on characteristics of age, race, education and employment. The average age of clients in the Initiative, Regular and Comparison groups was 33, 33 and 32 years of age. The vast majority in each group (82%, 81% and 90%) was African American. Approximately one-half of each group had at least completed high school. And one-quarter of each group was employed either full-time or part- time. The small proportion of women employed no doubt explains the fact that only about one-quarter of the women in each group had family incomes greater than $10,000. So, across the three groups we have women who are about 33 years of age, predominantly African American with low levels of education, employment and income.

Table 1: Characteristics of Study Participants

Characteristic:	Initiative treatment (n=73)	Regular treatment (n=75)	Comparison (n=51)	p
Age	33	33	32 .75	
Race/ethnicity:				
Black.	82%	81%	90%	.65
White	10%	13%	8%	.65
Hispanic	3%	0	2%	.65
High school or more education	53%	47%	59%	.40
Employed	26%	29%	20%	.26
Full-time	12%	17%	4%	.26
Part-time	14%	12%	16%	.26
Income > $10,000	23%	33%	26%	.33
Family characteristics				
# children < 18 years	3.6	3.6	3.6	.99
kids in DCFS custody	63%	57%	18%	<.0001
Any kids at home	48%	51%	84%	<.0001
Ever married	32%	37%	25%	.68
Have a partner	56%	59%	65%	.63
Partner is kid's father	46% (n = 41)	41% (n = 44)	70% (n = 33)	.03
Health characteristics				
Have a chronic illness	29%	28%	20%	.48
Had psych. Hospital.	23%	19%	6%	.04
Regular health insurance	4%	13%	20%	.02
If no regular, Medicaid	59%	48%	71%	.06
Any health coverage	60%	55%	77%	.05
Substance use				
Alcohol (> 5 drinks/day)	32%	26%	26%	.64
Marijuana	14%	27%	28%	.09
Cocaine	53%	61%	73%	.10
Heroin	15%	24%	24%	.34
Methadone	2%	4%	2%	.57
Sedatives	3%	4%	0	.37
Hallucinogens	0	1%	2%	.52
Other drug	1%	2%	2%	.95

*** p =.001, ** p = .01, * p = .05, a p = .10

Children and partners

The three groups were also quite similar with respect to their family situations. The average number of children (age less than 18 years) per family in each group was 3.6. The percentage of the Initiative, Regular and Comparison group members who had ever married was 32%, 37% and 25%, but 56%, 59% and 65% respectively reported

having a partner. And of those reporting a partner- .46%. 41% and 70% reported the partner was the father of one of their children. Across the three groups sampled in the study, most respondents had four children, had never married but had a partner who in many cases was the father of one of their children.

There were some differences across the three groups in terms of involvement with DCFS. Sixty-three percent of the Initiative group, 57% of the Regular group but only 18% of the Comparison group had a child in DCFS custody. Further, 48% of Initiative treatment clients, 51% of Regular treatment clients and 84% of Comparison treatment clients had children at home. The fact that only 18% of the Comparison women had children in DCFS custody and 84% had children at home is explained largely by the sampling procedure used. (Note that the total here is more than 100 percent because some families are "split custody" cases with some children removed and some still at home.) Whereas the two treatment groups were selected from current treatment participants, the comparison group was selected randomly from among cases that had recently received an SEI allegation. The fact that Comparison mothers all had a recent SEI allegation indicates that they all recently had a new baby. This increases the likelihood that they will have a child in their custody. Although this difference between the two treatment groups and the comparison group may have had important implications when interpreting the study results, the comparison group was ultimately excluded from the study analysis due to the high likelihood of treatment participation among this group (see below, p.7).

Health

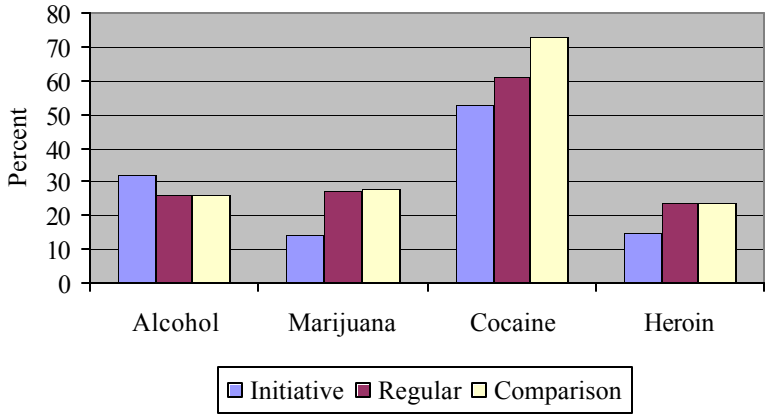
Overall, the three groups of women in the study reported relatively high rates of chronic health problems. In the Initiative, Regular and Comparison groups, 29%, 28% and 20% respectively reported chronic physical illness and 23%, 19% and 6% respectively reported a psychiatric hospitalization in the last six months. At the same

time, very few respondents reported having regular health insurance. In all three groups, most reported using Medicaid if they reported any coverage at all.

Substance use

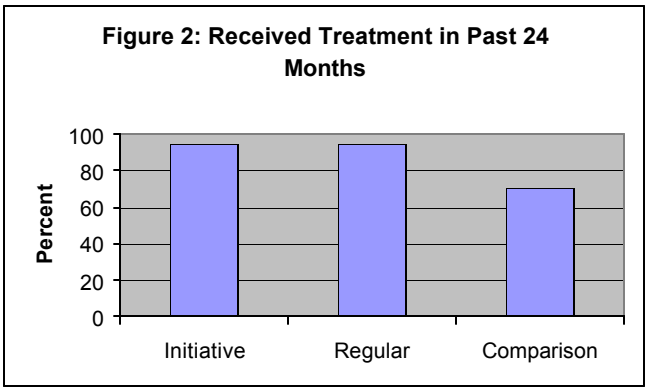
The survey asked clients to report their use of a set of licit and illicit drugs in the last thirty days. Table 1 and Figure 1 show the use of these substances for the three groups in the thirty days prior to treatment for the Initiative and Regular groups and thirty days prior to case opening for the Comparison group. For the Initiative, Regular and Comparison groups, 32%, 26% and 26% respectively had 5 or more drinks on at least one day in the 30 days before entering treatment; 14%, 27%, and 28% had used Marijuana; 53%, 61 % and 73% respectively had used Cocaine; and 15%, 24% and 24% had used Heroin. Use of other substances was minimal. Thus, in the thirty days prior to treatment (or case opening for the Comparison group), Cocaine was the substance used by the largest portion of each group. There was a statistically significant difference among the three groups in marijuana use ($p < .09$). Otherwise, there were no significant differences across groups in the use of any substance.

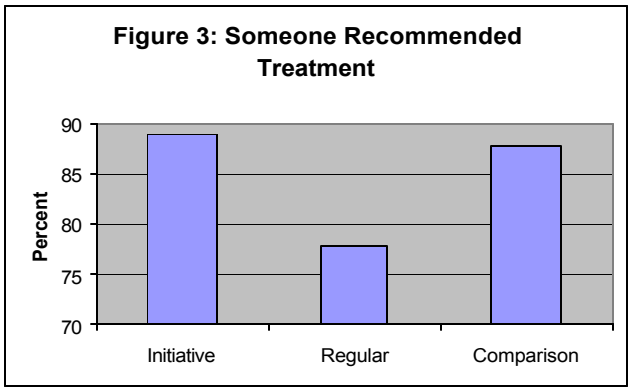
Figure 1: Substance Use by Treatment Type



Treatment status

Figure 2 reveals one of the most unexpected findings of the study: 71% of the Comparison group had received drug or alcohol treatment in the last twenty-four months. As described above, the study sought to construct a comparison group not receiving treatment, but with some indication of a substance abuse problem. Giving birth to a substance exposed infant was determined to be satisfactory indicator of a substance abuse problem in the mother. It was not anticipated that such a large proportion of these mothers would seek and receive treatment. The data in Figure 3, however, reveal that 88% of the comparison group of SEI mothers said that someone had recommended that they seek treatment.





When the comparison group was defined, we were seeking a group of individuals involved in DCFS with some indication of need for substance abuse treatment. It was expected that a random sample of DCFS-involved mothers with substance-exposed infants (SEI) would represent a sample of substance using DCFS clients who were not involved in treatment but who were comparable in many other ways to those already in treatment. It was not anticipated that so many of SEI clients would be in substance abuse treatment. The fact that nearly 90% of respondents reported that substance abuse

treatment had been recommended to them indicates that receiving an SEI allegation may in fact prompt referral to the substance abuse treatment system. Although not within the purview of this study, it is important to better understand the process by which SEI allegations appear to bring so many clients into substance abuse treatment.

With respect to this evaluation, the fact that nearly three-quarters of the comparison group had received some kind of substance abuse treatment meant the study no long had a valid 'no-treatment' comparison. As a result, **all further analyses were conducted comparing the Initiative treatment with the Regular treatment**. Without a no-treatment comparison, we can no longer estimate the extent that any treatment is better than nothing at all or 'letting nature run its course'. However, by comparing Initiative treatment with Regular treatment, we can estimate whether more comprehensive programming for women in substance abuse treatment --as defined by Initiative programs -- has a demonstrable effect. Thus, this report focuses on the implementation and impact of Initiative programming.

To summarize, research on women substance abusers indicates that, in comparison to men, they have significantly more characteristics known to be related to treatment failure and relapse. The characteristics of women in the study sample are consistent with the characteristics of women in other substance abuse treatment studies. These women have relatively low levels of education, employment and income. They report relatively high levels of chronic health and mental health problems. They have had on average 3.6 children, have never married but have a partner who in many cases is the father of one of their children. And as would be expected, their drug use is high with between half and three- quarters using alcohol plus one illicit drug in the 30 days prior to treatment.

IV. Program Participation

Given that the Initiative programs represent a service innovation whereby two state agencies are collaborating to provide comprehensive and effective services to substance-using women in the child welfare system, it is important to assess exactly what services were provided and used at the treatment centers where clients most recently received services, that is, where they were interviewed. Because an available service may, in fact, not be received or used by a client, we examined (1) whether clients' perceived a given service to be available, and (2) whether they reported using the service. The specific services required in the Initiative program as well as other services of potential benefit to substance abusing clients were examined. Specifically, respondents were asked about the perceived availability and use of the following services: child care, parenting classes, health care (including birth control counseling, HIV counseling, STD counseling, and reproductive health care), family counseling, domestic violence counseling, education and job training, housing assistance, legal services, transportation and support of an outreach worker. Program participants from Initiative treatment programs as well as those from Regular programs were asked to describe the program services that were provided and used.

Table 2 reveals clients' perceptions of services provided in the broad domains explored. Table 3 shows clients' reports of the services they actually received in these areas. The results reveal that in the specific areas where Initiative programs targeted more services --child care, transportation and outreach --program participants perceived that more services were provided and actually used these services more frequently. Specifically, the data show that over one-half of Initiative program clients and Regular program clients reported on-site child care was available at their treatment program. However, more Initiative clients reported that their programs also provided help with child care arrangements and they were significantly more likely to use this help. The

other two target services, transportation and outreach, were provided and used much more frequently as reported by clients in Initiative programs. And although parenting classes were not a targeted Initiative service, the findings show that in Initiative programs, parenting classes were provided and used more frequently than in Regular programs.

Table 2: Respondents' report of services available at treatment center

	Regular treatment (n = 75)	Initiative treatment (n = 73)	p
Child care			
On-site child care	58%	*62*%	.60
Child care arrangements	8%	18%	.05
Parenting classes	63%	82%	.01
Health care			
Birth control counseling	57%	62%	.45
Family counseling	96%	90%	.20
STD counseling	81%	84%	.60
Reproductive health care	35%	36%	.90
Family counseling	66%	63%	.74
Domestic violence counseling	71%	65%	.43
Education/job training	25%	27%	.73
Housing assistance	30%	30%	.94
Legal services	27%	27%	.94
Transportation	46%	78%	<.001
Outreach worker	58%	74%	.04

***p = .001
**p = .01
*p = .05
a p = .10

Table 3: Services received at treatment center

	Regular treatment (n=75)	Initiative treatment (n=73)	p
Child care			
On-site child care	28%	27%	.94
Child care arrangements	1%	7%	.09
Parenting classes	49%	66%	.04
Health care			
Birth control counseling	44%	41%	.72
HIV counseling	79%	79%	.90
STD counseling	64%	70%	.45
Reproductive health care	29%	27%	.80
Family counseling	24%	23%	.92
Domestic violence counseling	45%	38%	.39
Education/job training	13%	16%	.60
Housing assistance	04%	07%	.45
Legal services	08%	08%	.96
Transportation	37%	63%	.002
Outreach worker	48%	68%	.01

*** p = .001
** p = .01
* p = .05
a p = .10

In sum, the data show that the specific services provided by Initiative programs, *child care, transportation and outreach,* were in fact provided and clients were significantly more likely to report using these services than clients in Regular programs. In addition, participants in Initiative programs were more likely to participate in parenting classes. In both programs, clients reported relatively high usage of parenting classes, health care services, family and domestic violence counseling.

V. Service Need and Coverage in Initiative Programs

As discussed previously, it is well documented that the effectiveness of substance abuse treatment for women --and men --depends on the capacity of programs to meet medical and social needs related to substance abuse (McLellan, A. T., et al., 1993). National surveys of substance abuse treatment programs also document the *decreasing* availability of these types of services nationally (D'Aunno and Vaughn, 1995). The evaluation included a needs assessment measure that asked respondents to comment on their service needs and the extent to which they were met by the treatment programs. In contrast to the questions that asked clients to think about program services and whether they used them, this set of questions asked clients to reflect on their service needs more broadly and whether they were addressed. What we learn from Table 4 is that the majority of clients in both groups perceive needing help with medical care, housing, job counseling and family counseling. And Table 5 shows that it is in the areas of job counseling, family and domestic violence counseling, legal counseling and housing that they are least likely to report that their service needs were met. These findings suggest that, while the Initiative programs were more comprehensive by virtue of providing outreach, transportation and child care services, from the clients' perspective, a number of additional needed services were **not** provided by Initiative or Regular programs.

VI. Impact of Initiative Program on Substance Use, Health, Family and Parenting Outcomes

The most important question for this evaluation to address is whether involvement in the treatment program resulted in reduced substance use and improved health, family and parenting outcomes. Fundamentally, we are interested in whether Initiative program clients were significantly different from Regular program clients at the time of the

interview (i.e., on average 14 months after entering treatment) on measures of substance use, health, family and parenting. We also are interested in whether any differences we find may have resulted from participation in the Initiative program. We have determined that the program was implemented as planned, i.e., that clients in the Initiative program did, in fact, receive significantly more of the target services than the non-Initiative clients. There may be, however, many factors in addition to program involvement that can affect outcomes including severity of drug use going into the program, as well as individual factors such as level of employment, education and whether children are in the home. In order to eliminate the influence of these factors and in effect, isolate the impact of the treatment program on the outcomes of interest, regression models were developed to control for the effects of extraneous factors and provide a picture of the impact of the specific treatment program overall as well as specific services on outcomes. The theoretical and research literature on women's substance use was used to determine which variables would be included in the model. The models were developed and used to evaluate the impact of the Initiative program on each of the target outcome variables.

To address the first question, whether Initiative clients differed significantly from Regular clients, we simply compared the Initiative and Regular groups on the four outcome variables. To answer the second question of whether program participation may have been related to outcome, we used the regression models to examine the relation of the outcome variables to three sets of factors: (1) the program overall; (2) use of specific program services and (3) individual characteristics known to affect responsiveness to treatment including severity of drug use prior to treatment, employment, education, health, and whether kids are at home.

Table 4: Perceived need for service in past 24 months

	Regular treatment (n=75)	Initiative treatment (n=73)	p
Medical care	71%	64%	.41
Job counseling	57%	64%	.38
Child care	48%	37%	.18
Domestic violence counsel	36%	36%	.96
Family counseling	63%	54%	.25
Housing assistance	55%	53%	.88
Legal help	31%	43%	.14
Food stamps	44%	48%	.63

*** p = .001
** p = .01
* p = .05
a p = .10

Table 5: Of those who perceived need, the percent who received the service

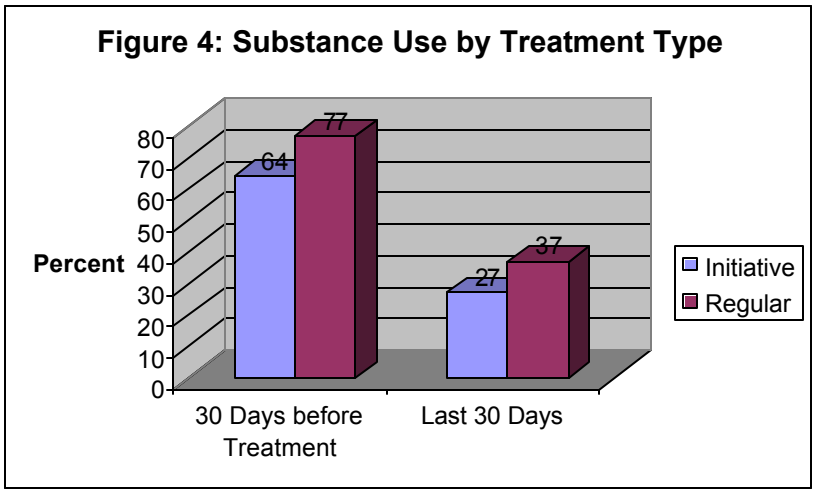
	Regular treatment (n=75)	Initiative treatment (n=73)	p
Any doctor visit	74%	75%	.90
Medical check up in program	19%	9%	.14
Job counseling	16%	15%	.85
Child care	42%	52%	.43
Domestic violence counseling	59%	35%	.08
Family counseling	26%	26%	.99
Housing assistance	7%	13%	.42
Legal help	4%	13%	.29

***p = .001
**p = .01
*p = .05
a p = .10

Substance Use

Were women clients in the Initiative program using drugs to a lesser extent than women in the Regular program? To answer this question, respondents were asked about their

drug use both in the thirty days prior to entering the program and in the thirty days prior to the interview. Most respondents were still engaged in treatment at the time of the interview. Figure 4 shows that when the substance use measure was self-reported use of alcohol, marijuana, cocaine or heroin, 27% of clients in the Initiative program versus 37% of clients in the Regular program had used drugs in the thirty days prior to the interview. Although this difference is in the expected direction, it is somewhat difficult to interpret since we know that there were preexisting differences in the two groups in terms of pre-treatment drug use. Fewer clients in the Initiative program (64%) compared with clients in the Regular program (77%) reported using substances in the thirty days prior to entering treatment.



In order to better understand the impact of the program on drug use outcome, as well as to control for individual differences, logit regression was employed to examine the relation of (1) the program overall, (2) specific services and (3) individual characteristics on substance abuse. For this analysis, the substance use outcome variable was a measure of self-reported use of alcohol, marijuana, cocaine or heroin at the time of the interview with the sample divided into any or no drug use based on the current use of these four substances. Table 6 shows the impact of the Initiative program and other factors on substance use. The logit regression results provided in Table 6 show that when (1) service use characteristics (such as use of transportation, outreach and child care as well as total number of services used) and (2) individual characteristics (such as prior drug use, employment, education, health status, whether kids are at home) are included in the model, the Initiative program is related to less drug use.

Specifically, the Initiative program participants were less likely to use substances at the time of the interview than were Regular program participants. In addition, using a number of different types of services, i.e., the absolute number of services used (such as health services, counseling or transportation), is positively related to a decreased likelihood of using drugs at the time of the interview. Individual factors negatively related to drug use are employment and having children at home. The factors related to a greater likelihood of using drugs at the time of the interview are use of outreach and transportation. In addition, clients who had a psychiatric hospitalization in the last six months or who were heavy alcohol, cocaine or heroin users prior to entering the programs were more drug involved at the time of the interview. The fact that respondents who used transportation and outreach services were more likely than respondents not using these services to report substance use may appear paradoxical at first. However, it is important to consider that this analysis as associational and not causal. Although we expect service use will have an impact on recent substance use and not vice versa, clients having the most difficulty staying off drugs are those who are likely to be most in need of

transportation and outreach. Moreover, because these two services are more likely to be available in Initiative and Regular programs, the association between recent substance use and use of transportation and outreach is likely to be strongest among Initiative participants.

Table 6

Logistic Regression Analysis: Relation between Current Drug Use and Initiative Program, Services Used and Individual Characteristics

	B	S.E.
Initiative program	-1.82	.57***
Service used		
Outreach	1.29	.52**
Transportation	1.81	.68**
On-site child care	-.63	.64
Off-site child care	1.96	1.26a
Total number of other services used	-.22	.11*
Individual characteristics		
Drug use prior to treatment	-.02	.0 17
Days in treatment	-.0002	.0012
Employed	-2.5	.74***
High school education	.16	.50
Children at home	-1.26	.54*
Chronic illness	-.70	.57
Previous psychiatric hospitalization	1.50	.60*
Alcohol use prior to treatment	.97	.56
Marijuana use prior to treatment	-.85	.66
Cocaine use prior to treatment	1.34	.64*
Heroin use prior to treatment	1.32	.73
Lives in Rockford	-.17	.74
Ratio of met needs to expressed needs	1.28	.93
Constant	(-.57)	

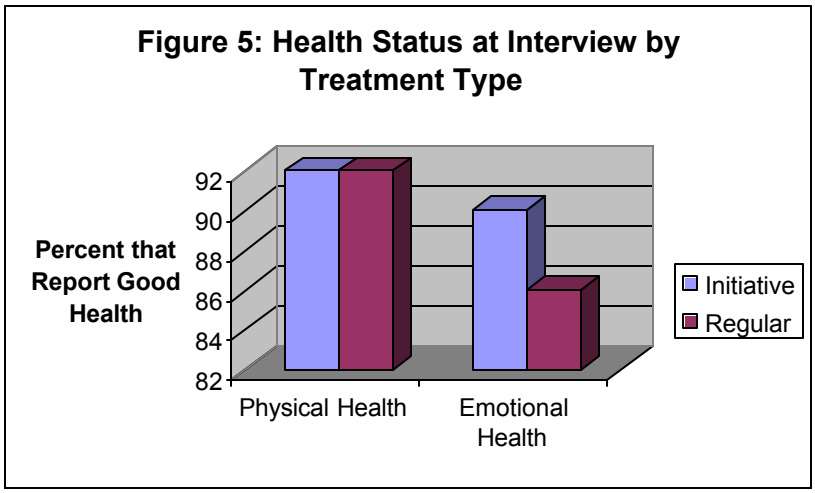
-2 Log Likelihood 129.381
Model Chi-Square 50.264, df 19, p = .0001

***p = .001
** p = .01
* p = .05
a p = .10

This analysis also shows that the program overall and the absolute number of program services used were negatively related to drug use. Total number of services used was defined by the number of different types of services used besides child care, outreach and transportation (e.g.. parenting classes, HIV counseling, job training). The finding that both the program overall and the number of specific services are related to decreasing drug use suggests that, while specific services are important, the program is more than just the services. It is possible that the Initiative programs were well-managed programs which provided case management in addition to the other target services. If this were the case, the significance of the program overall could be accounted for by these characteristics. In addition, the findings show that the Initiative programs are actively involved in providing transportation, child care and reaching out to the most severe substance users.

Health and mental health outcomes

One of the explicit goals of the program is to improve health and mental health outcomes for mothers. Certainly, the reduction in substance use found among Initiative clients may be viewed as an indication of improved client health. To measure health outcomes more directly, survey respondents were asked to rate both their physical health and mental health from excellent to very poor. Outcome variables were created that contrasted respondents who rated their health as poor and very poor with respondents who rated their health as good, very good, or excellent When the Initiative program clients were compared to Regular program clients, there was no difference in the two groups in these indicators of physical health or mental health. Figure 5 shows that 92% of both groups reported their physical health as good, very good, or excellent. Ninety percent of Initiative clients and 85% of Regular program clients reported their mental health as good, very good, or excellent.



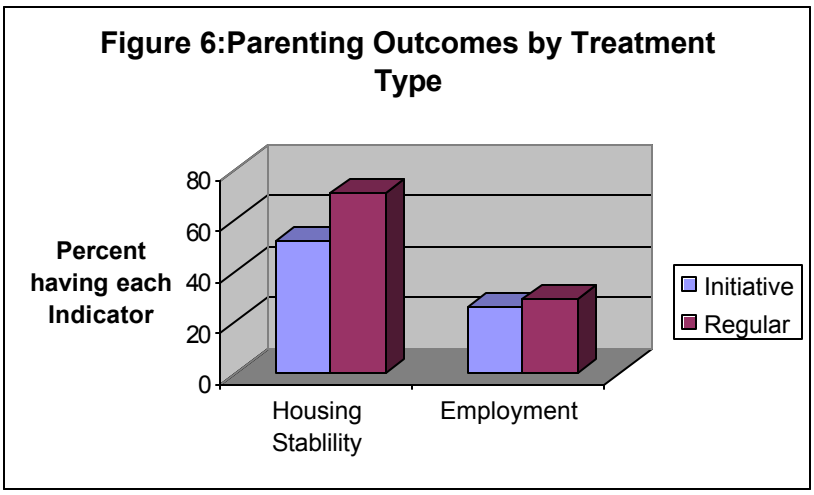
Program impact on physical health. When the effect of the Initiative program on physical health was examined using logit regression, there was little relation of the Initiative program to physical health (see Table 7 in Appendix D). Very few other factors were related to the health outcome. Transportation was the only service related significantly to physical health and it shows that the least healthy individuals use transportation the most. Having some form of health insurance was positively related to physical health. Good emotional health was related to good physical health. And a history of psychiatric hospitalization was inversely related to good physical health. The data also show the somewhat anomalous finding that having used marijuana in the thirty days prior to entering treatment is related to good physical health. In sum, while some individual characteristics are related to good physical health, no programmatic characteristics are.

Program impact on emotional health. When logit regression was used to examine the impact of the program overall and other factors on this outcome, the Initiative program *per se* had little relation to ratings of emotional health (see Table 8 in Appendix D). However, use of several different services were related to ratings of good emotional health including the use of transportation, outreach and domestic violence counseling. In contrast, family counseling, HIV counseling and doctor check-ups were

inversely related to ratings of good emotional health. Use of such services may be related to the presence of health or family problems, which are associated with poor emotional health. Of the individual factors inversely related to emotional health were prior psychiatric hospitalizations and the use of cocaine, alcohol and marijuana in the thirty days prior to entering treatment. In short, these findings indicate that clients who perceive their emotional health to be good are using transportation, outreach and domestic violence services while those who describe their emotional health as poor or very poor are using family counseling and HIV services. It also shows that those who perceive themselves to be in poor emotional health have had previous emotional problems as indicated by prior psychiatric hospitalization and were among the heaviest drug users prior to entering treatment.

Family and parenting outcomes

A third important goal of the program is to improve family and parenting outcomes specifically to provide for the safety and protection of children. Good measures of the programs' capacity to provide for the safety and protection of children are indicators of family functioning and stability. For this analysis, family housing stability and mother's employment status were examined as indicators of family stability and parental functioning. Figure 6 again reveals very little difference in the two groups on these two variables. Twenty-six percent of Initiative clients compared to 29% of Regular program clients were employed when interviewed. And 62% of Initiative clients and 71% of Regular program clients had moved fewer than two times in the last two years.



As revealed in Tables 9 and 10 in Appendix D, the Initiative program had very little relation to employment or housing stability. Having a job was positively related to using help with child care arrangements; it was negatively related to recent substance use, having a chronic illness, having children at home, and using GED classes. Housing instability was defined as having moved two or more times the last two years. Although the model indicates that housing instability is negatively related to recent substance use and having children at home, the effects of individual coefficients cannot be trusted in this model because the overall model is not significant. In other words, the variables included in the model are not good predictors of housing instability for the study participants. The information collected in this study may not be sufficient to predict housing stability for this client group.

VII. Implications for Program Development

Several findings from this evaluation have implications for program development. A summary of the most relevant findings is as follows:

1. The sample of clients in the Initiative programs, a special enhanced service program for substance abusing DCFS clients, were demographically similar to a sample of clients from regular substance abuse programs for women. Clients in both groups have characteristics known to be related to treatment failure and relapse. They have low levels of education, employment and income. They report relatively high levels of chronic health and mental health problems. They have 3.6 children on average, have never married but in many cases have a partner who is the father of one of their children.

2. Women from the Initiative programs were similar in severity of drug use to the comparison sample of clients from regular substance abuse programs. Between half and three-quarter have used alcohol and one illicit drug in the thirty days prior to entering treatment.

3. Initiative program clients reported that the target Initiative services -- transportation, outreach and child care –were, in fact, provided to and used by Initiative clients;

4. Though service enhancements of the Initiative programs were provided and used, respondents from both Initiative and comparison programs still reported service needs in the areas of job counseling, family and legal counseling and housing assistance that were not addressed in the programs.

5. Participation in an Initiative program was related to a decreased likelihood of recent drug use. The more different services clients used, the less likely they were to report recent drug use.

6. In the Initiative programs, the clients who are most actively using services are those with the most severe substance abuse problems.

7. Participation in the Initiative programs was unrelated to health status, mental health status, employment or housing stability.

The results of this evaluation support a basic truth in service design and evaluation: targeted services achieve targeted results. The Initiative programs focused on drug use reductions and they were successful in reducing drug use. They provided the services they were designed to provide -- transportation, outreach and child care --and these were services designed primarily to promote greater access to the program. The outreach and transportation services apparently enabled clients to more easily get to the drug treatment programs. Similarly the provision of child care appears to free mothers to participate in treatment activities. And the data show that the more services clients were able to use by virtue of greater access, the more they reduced their dependence on drugs.

Program participants also indicated several areas in which they needed services that were not provided. These were job counseling, family and legal counseling and help with housing.

The goals of the program were broader than simply the reduction of drug use. The legislation describing the program included the goals of improved health outcomes, family and parenting outcomes. The analysis showed no relation between program participation and health or mental health status. Further, there was no effect of program participation when employment and housing stability were used as indicators of family and parenting outcomes. Clearly, the service enhancements incorporated in the Initiative programs were not focused on health, employment and housing. And these were areas where respondents in both Initiative and non-Initiative programs reported services were needed but unavailable. Since the target services were not focused on these outcomes and the evaluation follow-up timeframe was so short, it is not surprising that no short-term effects of program participation were identified in these areas.

Future analyses will explore the extent to which program participation is related to additional reports of child abuse or neglect and to the closing of cases in the Department of Children and Family Services. These analyses will provide additional information on the effect of the program on family and parenting outcomes. Overall, however, the evaluation findings indicate that the Initiative program was successfully implemented and successful in reducing participants' drug use. Clearly, this is a very important step in the achievement of broader goals of improved health, parenting and family outcomes.

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Appendix A

Report on Sampling Design and Sample Selection

DASA/DCFS OUTCOME STUDY

SRL STUDY #774

Report on Sampling Design and Selection

July 17, 1997

The University of Illinois Survey Research Laboratory (SRL) conducted the survey portion of a program evaluation of the DASA/DCFS Initiative Program. Interviews were conducted with three groups of DCFS clients: 1) women who entered a drug and alcohol treatment program at an Initiative - funded site between July 1, 1995 and June 30, 1996; 2) women who entered a drug and alcohol program at a non-Initiative-funded site between July 1, 1995 and June 30, 1996; and 3) women who had given birth to a substance-exposed infant (SEI) and had a family case opened between July 1, 1995 and June 30, 1996 and who may or may not have sought treatment [1]. Groups 1 and 2 were considered experimental groups, and group 3 was the control group.

[1] According to the documentation received from DASA (via the University of Chicago) regarding the control file, inclusion in the sample was defined as follows: "Only cases that were preceded by an indicated substance misuse allegation up to two months prior to the family case opening or were followed by an indicated substance misuse allegation up to one month after the family case opening were identified as SEI cases in this analysis."

Sample design and procedures

The sample for the experimental group was obtained by DASA and supplied to the 13 treatment centers (2 in Rockford and 11 in Chicago) who participated in the evaluation. After eliminating males, juveniles and duplicates from the sample, the sample contained 471 women. The sample was released to the treatment sites in December 1996, and each site was initially responsible for locating the women and gaining their cooperation to the study. SRL was then contacted and appointments were set up for the women to be interviewed at their treatment site or at the SRL office. In March 1997, the sites were asked to stop locating respondents and SRL took over the locating procedures. SRL was provided with the social security numbers and corresponding treatment site names for each respondent.

The control group sample was also provided by DASA in conjunction with the University of Chicago. SRL randomly selected two hundred women from a list of DCFS clients who had a family case opened between July 1, 1995 and June 30, 1996 (see footnote 1). SRL was provided with a sample file that contained, among other things, respondent names and addresses and date of birth.

In order to locate the selected respondents, SRL implemented the following locating procedures:

Control Respondents

1) SRL randomly selected 200 respondents from a list provided to SRL by DASA. The list consisted of women who had a family case opened between July 1, 1995 and June 30, 1996.

2) The sample contained name and address information for each selected respondent. Therefore, SRL immediately mailed to each respondent an introductory letter explaining the study and asking her to call an 800 number if she is interested in participating.

3) Additionally, SRL called Directory Assistance to attempt to get telephone numbers for each selected respondent. For respondents for whom telephone numbers were not available, SRL interviewers attempted to contact the respondents to schedule an interview.

4) The University of Chicago arranged for SRL interviewers to have access to Public Aid records. Therefore, SRL looked up each selected respondent in the Public Aid records to get additional addresses and telephone numbers, when available.

5) As letters were returned undeliverable to SRL, letters were sent to new addresses acquired through Public Aid, if one was available.

6) If no address was found in the Public Aid records, SRL submitted the respondent's social security number to Equifax, (a locating service based on credit reports). If a new address was found, an intro letter was sent to the respondent at that address.

7) If no new address was found in Public aid or Equifax, the case was finalized as unlocatable.

Experimental Respondents

1) SRL received a list of 471 social security numbers and corresponding treatment site names from DASA. The social security numbers of the 76 respondents with whom an interview had already been completed were removed from the list.[2]

2) Each respondent's social security number was looked up in Public Aid records in order to obtain names, addresses and telephone numbers, when available.

3) In addition, each respondent's social security number was looked up in Equifax (a locating service) in order to obtain names, addresses and telephone numbers, when available.

4) SRL mailed an introductory letter to each respondent for whom information was available. In approximately 20 cases, a different name was obtained from Equifax than had been obtained from Public Aid. In those cases, at DASA 's request, SRL sent introductory letters to both addresses.

The introductory letters invited the respondents to call SRL to set up an interview in our office (special arrangements were made to continue to Interview at PHASE in Rockford). Shortly after the letters were sent, SRL field staff began calling the women in an attempt to set up an interview appointment. Initially, an incentive of $25 was offered to each woman for participating in face-to-face interviews completed at the treatment sites, and the sites received $40 for locating each woman from their center who was interviewed. When SRL took over the locating portion, the respondent incentive was increased to $40.

Disposition and Completion Rates

The total sample size was 673. The control sample consisted of 200 cases, while the sample for the experimental sample was 473. Table one lists the final dispositions for the controls, experimental and total sample. Table two lists the completion rates for each group and the total sample. Appendix A contains a description of the disposition codes.

Table 1: Disposition of Sample

	Controls		Experimental		Total	
(01) Completed interview	51	25.5%	148	31.3%	199	29.6%
(30) No answer	17	8.5%	16	3.4%	33	4.9%
(31) Answering machine	2	1.0%	14	3.0%	16	2.4%
(32) Respondent not available	22	11.0%	30	6.3%	52	7.7%
(41) Final refusal to interview	3	1.5%	1	0.2%	4	0.6%
(57) Unable to locate	104	52.0%	259	54.8%	363	53.9%
(85) Deceased	--	--	1	0.2%	1	0.1%
(88) Foreign language speaking	1	0.5%	1	0.2%	2	0.3%
(89) Duplicate	--	--	3	0.6%	3	0.4%
Total Sample	200		473		673	

Table 2: Completion Rates

Total Sample	200		473		673	
(85) Deceased	0		1		1	
(88) Foreign language speaking	1		1		2	
(89) Duplicate	0		3		3	
True sample	199	99.5%	468	98.9%	667	99.1%
(30) No answer	17		16		33	
(31) Answering machine	2		14		16	
(32) Respondent not available	22		30		52	
(57) Unable to locate	104		259		363	
Cases located	54	27.1%	149	31.8%	203	30.4%
(41) Final refusal to interview	3		1		4	
Final completes	51	94.4%	148	99.3%	199	98.0%

The overall response rate was 29.8% (199 completes divided by the true sample size of 667). The response rates for the control and experimental groups were 25.6% and 31.6% respectively. The overall refusal rate was 0.6% (1.5% for the control group, 0.2% for the experimental group). The large number of cases that were "unable to locate" was the major reason for the low response rate. By removing those cases from the denominator the response rates would have been 53.7% for the control group, 70.8% for the experimental group, and 65.5% for the total sample. The analysis conducted to assess potential response bias is described in Appendix B.

Appendix B

Results from Response Bias Analysis

Results from Response Bias Analysis

Possible bias due to individual non-response. As indicated in the report text and in Appendix A, the overall response rate in this study was 30%. One major reason for the relatively low response rate is that interviewers were unable to locate many respondents. The overall response rate leaves open the possibility that non-respondents differ significantly from respondents in ways that could affect the results. That is, it is possible that if non-respondents had participated in the study we would have found different results. Suppose, for example, that non-respondents had more severe drug abuse problems than study participants. In this case, if the non-respondents had participated in the experimental group, the result might be fewer decreases in drug abuse after treatment.

To assess the potential for such bias to affect the study results, we conducted several analyses comparing study participants to non-participants. More specifically, data were available to conduct 30 separate comparisons between these two groups. We compared the two groups on a range of important variables, including demographic characteristics, severity and types of drug use problems, and employment status and income. The fewer the differences between the two groups, the less likely it is that a non-response bias could affect the study results.

Results from these analyses show that the study participants are quite similar to the non-participates. The two groups did not differ on 24 of the variables we examined. Nonetheless, the participants differ significantly from non-participants in the following ways. First, the participants are more likely to be Black and married. Second, the participants have less health care insurance (including Medicaid benefits). Third, the participants are more likely to use heroin and methadone treatment. Finally, the participants are more likely to have open DCFS cases than non-participants.

These results suggest that, if anything, the participants have more severe drug use (i.e., heroin), health (no insurance), and child care problems (open DCFS cases) than the non-participants. In other words, it is not likely that the decreases in drug use among study participants reported in the text are due to gains made by individuals with relatively less severe drug use, health and social problems. In short, the available evidence suggests that the study results would generalize to a general population of DCFS clients in substance abuse treatment.

Possible bias due to treatment unit selection. A second possible source of bias is that the treatment units selected to participate in the study, specifically as experimental sites, may differ from the general population of treatment units. To the extent this is true, efforts to extend the Initiative services to other treatment units in Illinois might not yield similar results. It is possible, for example, that even before the study began, the study sites were more effective in providing treatment and social services than other treatment units in the state. If so, extending the Initiative services to other treatment units might not yield results as beneficial as those reported above.

We had relatively little data to examine how the study sites compare to other treatment units. We did compare the Initiative treatment sites to the regular treatment sites, and found that the two types of sites provided similar services (that is, with the exception of the enhanced services under study). At the same time, however, the Initiative treatment sites are providing useful services to clients; they are well-established and relatively large treatment providers. As a result, caution should be taken in attempting to generalize the study results to the state' s population of substance abuse treatment units.

Appendix C

Reliability and Validity of Self-Reported Substance Use

Reliability and Validity of Self-Reported Substance Use

As discussed in the text, data concerning participants' substance use (including alcohol and illicit drugs) were collected from participants themselves. This method raises questions about the reliability and validity of these data. It is thus important to emphasize that the reliability and validity of self-report data from substance abuse clients have been well-established (e.g., Lettieri, 1992). Many methodological studies have compared results form clients' self-reported drug use to results obtained from urine, blood and hair tests. These studies show that these approaches yield similar results.

As a result, the great majority of substance treatment outcome studies use clients' self-report data (e.g., Hubbard, Marsden, Rachal, Harwood, Cavanagh & Ginzburg, 1989). Moreover, self- report data on drug use are used in several major, annual national studies, including the National Household Survey on Drug Abuse and the Monitoring the Future Study of high school seniors (Johnston, O'Malley & Bachman, 1996).

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Appendix D

Logit Regression Analyses of Health, Mental Health and Parenting Outcomes.

Table 7

Logistic Regression Analysis: Relation between Physical Health and Initiative Program, Services Used and Individual Characteristics

	B	S.E.
Initiative program	.58	1.02
Service used Outreach	1.58	1.13
Transportation	-2.09	1.19a
Parenting classes	-.88	1.26
Baby sitting arrangements	6.78	34.47
Reproductive health services	-.94	.94
STD counseling	-.25	1.17
HIV counseling	-2.69	1.96
Checkups with doctor	-.51	.98
Individual characteristics		
Chronic illness	-.74	1.13
Has any health coverage	2.44	1.03*
Previous psychiatric hospitalization	-2.97	1.55*
Good emotional health	3.39	1.73*
Smokes cigarettes	.95	1.18
Age	-.05	.09
African American	-2.16	1.71
High school education	.66	1.12
Employed	.46	1.19
Used drugs in last 30 days	-1.27	1.07
Cocaine use prior to treatment	-.82	.96
Alcohol use prior to treatment	-1.60	1.21
Marijuana use prior to treatment	3.35	1.71*
Heroin use prior to treatment	2.20	1.75
Constant	(8.95)	

-2 Log Likelihood 48.6; Model Chi-Square 34.1, df 23, p = .06
*** p = .001
** p = .01
* p = .05
a p = .10

Table 8

Logistic Regression Analysis: Relation between Emotional Health and Initiative Program, Services Used and Individual Characteristics

	B	S.E.
Initiative program	-2.19	1.36
Service used		
Family counseling	-5.63	1.90**
Domestic violence counseling	3.05	1.34*
Transportation	2.34	1.33a
Outreach	2.55	1.38a
Parenting classes	1.48	1.03
HIV counseling	-4.13	1.80*
Check ups with doctor	-3.46	1.63*
Individual characteristics		
Chronic illness	1.96	1.30
Has any health coverage	.17	.97
Previous psychiatric hospitalization	-4.59	1.39***
Good physical health	2.71	1.10**
Smokes cigarettes	.27	1.00a
Age	.08	.07
African American	-2.69	1.51a
High school education	.27	.99a
Employed	-1.91	1.32
Used drugs in last 30 days	-5.44	1.81 ***
Cocaine use prior to treatment	-3.96	1.68*
Alcohol use prior to treatment	2.76	1.44*
Marijuana use prior to treatment	-.74	1.35
Heroin use prior to treatment	.15	1.08
Constant	(11.12)	

-2 Log Likelihood 52.43; Model Chi-Square 56.34, df22, p = .0001

*** p = .000

** p = .01

* p = .05

a p = .10

Table 9

Logistic Regression Analysis: Relation between Employment and Initiative Program. Services Used and Individual Characteristics

	B	S.E.
Initiative program	-.76	.59
Service used		
GED classes	-4.14	1.66**
Job training	1.34	.89
Transportation	-.12	.70
Outreach	.37	.56
On-site child care	-.27	.67
Child care arrangements	4.77	1.77**
Total number of services used	.11	.12
Attend AA meetings	-.67	.58
Individual characteristics		
Chronic illness	-1.82	.66**
Previous psychiatric hospitalization	.44	.65
Children at home	-.106	.55*
Number of children	-.27	.17
Age	.01	.05
African American	-.42	.71
High school education	.15	.57
Used drugs in last 30 days	-2.74	.77***
Cocaine use prior to treatment	.91	.64
Alcohol use prior to treatment	-.53	.66
Marijuana use prior to treatment	-.93	.77
Heroin use prior to treatment	-.38	.72
Constant	(1.35)	

-2 Log Likelihood 115.466, Model Chi-Square 53.38, df 21, p = .0001
*** p = ..000
** p = .01
* p = .05
a p = .10

Table 10

Logistic Regression Analysis: Relation between Housing Stability (moved 2 or more times in past 2 years) and Initiative Program, Services Used and Individual Characteristics

	B	S.E.
Initiative program	.32	.45
Service used		
Housing assistance	.47	1.06
Outreach	-.18	.44
Transportation	.23	.53
GED classes	-.69	.68
Parenting classes	.38	.53
Number of services used	-.13	.12
Number days in treatment	-.0002	.0010
Individual characteristics		
Used drugs in past 30 days	-1.16	.52**
Employed	-.05	.44
High school education	.10	.44
Children at home	-.79	.43*
Previous psychiatric hospitalization	-.21	.53
Chronic illness	-.79	.49
Lives in Rockford	.12	.64
Cocaine use prior to treatment	.53	.47
Marijuana use prior to treatment	.36	.55
Alcohol use prior to treatment	-.12	.45
Heroin use prior to treatment	-.50	.54
Constant	(.48)	

-2 Log Likelihood 165.42, Model Chi-Square 19.68, df 20, p = .48

*** p = .000

** p = .01

* p = .05

a p = .10