

Mentally Ill Offender Community Transition Program

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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	5
MIO-CTP EVALUATION STUDY	7
Client Characteristics	7
Demographics	7
Exhibit 1 – Characteristics of MIO-CTP Participants	8
Diagnosis	9
Exhibit 2 – MIO-CTP Participant Diagnoses.....	9
Treatment Services Provided.....	10
Exhibit 3 – MIO-CTP Treatment Services	10
Hospitalization for Psychiatric Reasons	10
Comparison of Treatment Services Received.....	11
Exhibit 4 – Percentage of Subjects Receiving Outpatient Services	11
Exhibit 5 – Average Monthly Outpatient Mental Health Service Hours	12
Global Assessment of Function (GAF) Change	12
Exhibit 6 – Comparison of Initial and Final GAF Scores.....	12
Recidivism Outcomes Analysis	13
Methods	13
Results	14
Exhibit 7 – Recidivism of MIO-CTP Participants and Matched-Control Mates.....	15
Exhibit 8 – Comparison of MIO-CTP Participants’ and Matched-Control Mates’ Rates of Any New Offense at Various Intervals*	16
Exhibit 9 – Types of Most Serious New Crime	17
Correlates to Felony Recidivism.....	17
Exhibit 10 – Symptom/Behavioral Correlates of Felony Recidivism.....	18
Summary and Conclusions	19
References.....	21
APPENDIX A: LEGISLATIVE INFORMATION.....	22
APPENDIX B: PROGRAM IMPLEMENTATION	24
Oversight Committee	24
Program Administration.....	24
Program Staffing	24
Participant Referral and Selection.....	25
APPENDIX C: PROGRAM COMPONENTS	26
Coordinated Pre-release Planning.....	26
Intensive Post-release Case Management	26
Outreach and Engagement.....	27
Structured Programming	28
Crisis Response	28
Residential Support Services	28
Community Safety.....	29
Community Supervision	29
Treatment for Co-occurring Disorders of Mental Health and Substance Abuse	30
Employment Services	31
Transitions.....	32
APPENDIX D: PROGRAM SUCCESS STORIES	33
Participant 1	33
Participant 2	33
Participant 3	34
APPENDIX E: TECHNICAL VERSION of METHODOLOGY and RESULTS.....	36
Methods	36

Exhibit E1 – Recidivism Predictors.....	38
Exhibit E2. Prediction Variable Ranges, Risk Scores, and Recidivism Rates for Control Subjects (N=1550).....	39
Exhibit E3 - Felony Risk Scores & Recidivism Rates for Control Subjects (N=1550)	40
Results	41
Exhibit E4 – Recidivism of MIO-CTP Participants and Matched-Control Mates.....	41
APPENDIX F: COMPARABILITY OF MENTALLY ILL OFFENDER-COMMUNITY TRANSITION PROGRAM and COMMUNITY INTEGRATION ASSISTANCE PROGRAM.....	42

Mentally Ill Offender - Community Transition Program 2008 Annual Report to the Legislature

EXECUTIVE SUMMARY

The goal of the ***Mentally Ill Offender – Community Transition Program*** (MIO-CTP) is to increase public safety, reduce incarceration costs through reduction of recidivism, and to improve a mentally ill offender's chances of succeeding in the community.

The MIO-CTP was initiated in 1998 with RCW 71.24.455 and charged with developing post release mental health care and housing, through intensive case management. The target population was a participant group of 25 seriously mentally ill offenders. Administration of the program is provided by the Department of Social and Health Services (DSHS), under contract with the King County Regional Support Network (KC-RSN) and its subcontractors. DSHS collaborates with the Department of Corrections (DOC) to ensure cross-agency communication.

Selecting Program Participants:

Program participants are selected for inclusion in the program utilizing specific selection criteria based on statutorily mandated elements and clinical judgment. Candidates are referred from four correctional facilities or "launch sites" and screened by DOC for program appropriateness. A multidisciplinary selection committee reviews all candidates and makes selection decisions.

Major Program Components:

The major program components include:

- Coordinated pre-release planning
- Intensive post-release case management
- Treatment for co-occurring disorders (mental health and substance abuse)
- Residential support / Employment services
- Community supervision by DOC

Program Success:

MIO-CPT is accomplishing the goal of reducing recidivism as follows:

- MIO-CTP participants were significantly less likely to commit a new felony within two years of release than a comparison group of mentally ill offenders matched on a series of nine variables that are predictive of recidivism. MIO-CTP participants enrolled prior to 2003 were one-third as likely to commit a new felony within two years of release, compared to a matched-comparison control group of offenders.
- New violent felony crimes have been committed by only 6.5 percent of the MIO-CTP participants, which comprises 14.6% of new crimes compared to 38.3% of index offenses.

- The largest proportion of new felony crimes by program participants were drug related. New crimes for program participants tended to be less serious crimes than the matched-comparison controls.

Interviews of program participants who re-offended suggest certain factors that contribute to their recidivism:

- Self reported psychiatric symptoms of depression, attempted suicide, and auditory hallucinations were associated with higher recidivism.
- Self reported substance use was associated with higher recidivism.

Conclusion:

The evidence supports the effectiveness of intensive mental health case management services in reducing the likelihood of subsequent criminal recidivism and reducing the seriousness of new crimes committed.

Treatment of psychiatric symptoms, particularly depression, suicidal ideation, auditory hallucinations, and substance abuse appears effective in preventing further criminal activity among offenders with serious mental illness.

MIO-CTP EVALUATION STUDY

The *Mentally Ill Offender Community Transition Program* (MIO-CTP) was established in 1998 by the Washington State Legislature to evaluate the effectiveness of an intensive case management program in reducing recidivism among mentally ill offenders released from state prisons (See **Appendix A**.) A narrative of Program Implementation is found in **Appendix B**; a full description of Program Components is in **Appendix C**; and Program Success Stories are in **Appendix D**.

This report includes information on one-hundred fifteen (115) individuals who were enrolled in the program and have received mental health services. The large majority of participants has received pre-release services prior to release from prison and has also received post-release mental health services in the community. As a point of reference, demographic data and service levels are compared to data from the Mentally Ill Offender Community Transitions Study (CTS) conducted by the Washington Institute for Mental Illness Research and Training (Lovell, Gagliardi, and Peterson, 2002.) The CTS group is the only comparison group with this data available. Subjects from the CTS study and a subsequent study of recidivism in Washington State (Lovell, Johnson, and Cain, 2007) provide a baseline dataset of offenders with mental illness, from which a group of 92 matched controls were drawn for an analysis of recidivism in the two years following release from prison for the program participants.

Client Characteristics

Mentally ill offenders accepted and enrolled as active participants in the intensive outpatient case management program are profiled. The information presented here reflects data on one-hundred fifteen (115) participants enrolled between September 1998 and March 31, 2008.

Demographics

Demographic information and offense history of program participants is presented in **Exhibit 1 – Characteristics of MIO-CTP Participants**. As a point of reference, data from the CTS group is included.

Three-fourths (76.5%) of program participants have been convicted of more than one felony. This compares to 83 percent of CTS comparison group subjects having more than one felony conviction. The Index Offense is the offense for which the individual was incarcerated just prior to release for the respective studies. More than 40% of MIO-CTP participants registered a drug crime as their index offense.

The mean length of time spent in prison for the Index Offense for all program participants is 27.0 months (median=20.7, SD = 21.3)¹ versus an average 28 months for CTS subjects.

Exhibit 1 – Characteristics of MIO-CTP Participants

MIO-CTP Participant Characteristics			
Characteristic		MIO-CTP N=115	CTS (N=333)
Gender	Male	72.2%	70.0%
	Female	27.8	30.0
Race	White/Caucasian	53.9%	72.0%
	Black\African American	27.8	23.0
	Other	18.3	5.0
Age	Mean	36.7 years	33.0 years
	Standard Deviation	8.3 years	--
Number Prior Felonies	One	23.5%	16.8%
	2-4	44.3	31.8
	5-7	23.8	19.2
	8-10	5.2	8.6
	11+	5.2	20.7
Index Offense	Homicide/Manslaughter	2.6%	3.0%
	Sex Offense	9.6	15.0
	Robbery/Other Violent	26.1	26.0
	Burglary/Other Property	19.1	24.0
	Drug	41.7	31.0
	Other	0.9	1.0

While all program participants received some form of mental health treatment while incarcerated, the majority (87%) required residence in a specialized mental health treatment unit some time during their incarceration. The remaining 13 percent lived in the general population throughout their incarcerations. For participants who required residential mental health treatment, the mean number of months in a Department of Corrections mental health unit was 13.7 (median=10.4, SD = 12.9) months.

While these comparisons to the original CTS study are useful, a more critical analysis of MIO-CTP recidivism utilizing predictive data in a matched-control comparison study is presented later in this report.

¹ Three extreme cases of 340 mos, 285 mos, and 229 mos were dropped from the MIO-CTP averaging. The next longest length of incarceration included in the calculation was 119 mos.

Diagnosis

Exhibit 2 – MIO-CTP Participant Diagnoses displays the primary psychiatric diagnostic categories of participants at the time of enrollment. The diagnosis was made by the outpatient mental health service provider.

Many MIO-CTP participants carry multiple Axis I diagnoses. The principal Axis I diagnosis was determined by the following decision process. Psychotic disorders, primarily schizophrenia, took first priority, followed by depression, bi-polar, and other disorders. In other words, if a client had Axis I diagnoses of schizophrenia and depression, the principal diagnosis was considered to be a psychotic disorder. In addition to the principal Axis I disorder, most participants also have an Axis I substance abuse disorder, referred to as a co-occurring disorder.

Exhibit 2 – MIO-CTP Participant Diagnoses

MIO-CTP Participant Diagnosis		N=110*
Principal Axis I Diagnosis	Psychotic Disorder	48.2%
	Depression	24.5
	Bi-polar Disorder	23.6
	Substance Abuse Primary	3.6
Mean Initial Global Assessment of Functioning—Axis V		36.1
Co-occurring Substance Abuse Disorder (Axis I)		90.9%
Personality Disorder Dual Diagnosis (Axis I + Axis II)		56.4%

*Does not include data on 5 individuals who refused to authorize a release of their healthcare information.

The majority of MIO-CTP participants have complex and severe mental health problems.

- Nearly half (48.2%) of program participants have a principle Axis I disorder of psychosis.
- A vast majority (90.9%) of program participants have been dually diagnosed with a substance abuse disorder in addition to the principle Axis I disorder.
- Just over half (56.4%) of program participants have an Axis II Personality Disorder in addition to their Axis I disorders.
- All persons diagnosed with an Axis II, Personality Disorder, also have a co-occurring substance abuse disorder.

Treatment Services Provided

Program participants have highly variable treatment experiences in the program. Services and length of stay in the program depend on individual circumstance and need. The length of time offenders have participated in the program has varied from a minimum of 4 days to a maximum of 106.8 months. The mean length of program involvement for the 96 individuals who have been terminated is 22.4 months, with a standard deviation of 19.3 months.

Program participants receive a variety of services during their involvement in the program. The range of services is presented in **Exhibit 3 – MIO-CTP Treatment Services**. This table includes pre and post-release services.

Not all participants receive all services and the blend of services received is tailored to the needs of the individual. For example, only a portion of the participants require the intense supervision of day treatment services. Some participants require and/or benefit from more individual treatment, while others spend more of their treatment contacts in a group setting.

Exhibit 3 – MIO-CTP Treatment Services

Treatment Modality	N = 37097 hours* (September 1998 – March 2008)
Individual Treatment	48.4%
Group Treatment	26.6
Day Treatment	13.9
Treatment Planning (Includes Consult with DOC staff)	6.4
Special Evaluation/Consult	2.0
Medication Management	2.7
Total	100%

*Service data does not include 5 individuals who refused to authorize a release of their healthcare information.

Hospitalization for Psychiatric Reasons

Nineteen of the 109 (17.4%) MIO-CTP participants (five refused to authorize release of healthcare information and one was not released into the community at the time of data collection) have been hospitalized for psychiatric reasons during the period of program involvement. This compares to 23 percent of CTS subjects. One individual has been hospitalized twenty-one times, one person hospitalized six times, 2 persons five times, 6 persons twice, and nine participants have been hospitalized once. Of the fifty-eight hospitalizations, 27.6 percent have been involuntary.

With the exception of one hospitalization that lasted approximately 30 months, the mean length of stay was 10.3 days (median=7.0, SD = 10.4.)

Comparison of Treatment Services Received

Mental health treatment services received by program participants are compared to treatment services received by the CTS group in **Exhibit 4 – Percentage of Subjects Receiving Outpatient Services** and **Exhibit 5 – Average Monthly Outpatient Mental Health Service Hours**. The CTS comparison data is provided here only as a context for the level of services that offenders are receiving in this program compared to services received prior to implementation.

Only 10 percent of CTS subjects received pre-release services, compared to 93.6 percent of MIO-CTP participants (N=109.) Only 45 percent of CTS subjects received any post-release services, while 97.2 percent of MIO-CTP clients (N=109) received post-release services. MIO-CTP participants received an average of 9.5 pre-release hours per month of service and 15.7 hours of service per month after release, compared to 2.5 hours of service per month and 3.8 hours of service per month, respectively, for CTS subjects when they did receive services.

Exhibit 4 – Percentage of Subjects Receiving Outpatient Services

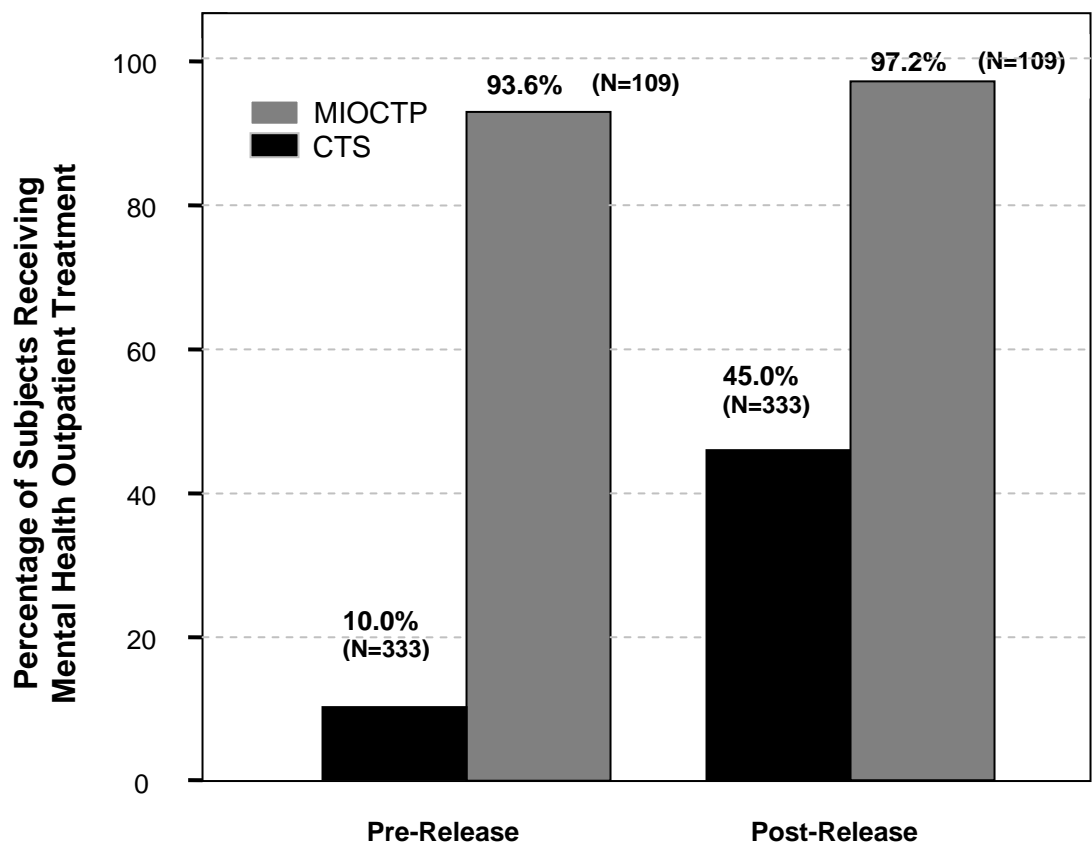
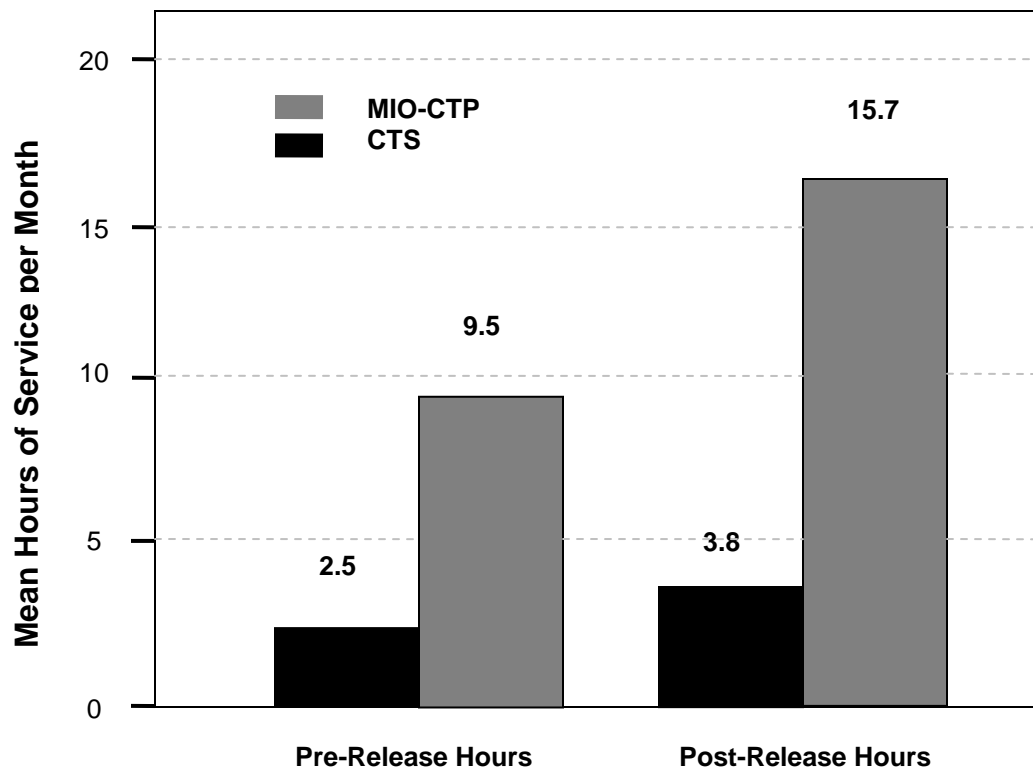


Exhibit 5 – Average Monthly Outpatient Mental Health Service Hours



Global Assessment of Function (GAF) Change

One measure of the impact of services is the change in GAF scores of participants over the course of program involvement. Change in GAF scores are reported in **Exhibit 6 – Comparison of Initial and Final GAF Scores**.

Exhibit 6 – Comparison of Initial and Final GAF Scores

Initial GAF Score	Final GAF Score	p^2
36.1	38.4	.004

There is a small, but statistically significant improvement in the GAF scores of participants over the course of involvement with the program. It is useful to keep in mind that initial GAF scores are assessed at the beginning of program involvement, but after any treatment that occurred during incarceration.

² The p value indicates the percentage of likelihood that the difference found between groups would occur by chance. A p of .01 means a difference of that size would occur only one in one hundred times.

Recidivism Outcomes Analysis

The 2008 recidivism analysis of participants in the Mentally Ill Offender Community Transition Program (MIO-CTP) covered 92 participants released from prison into the program since its inception in 1998 until the end of 2005.

- This period of inclusion in this analysis allowed for two years of community follow-up for all participants.
- Five individuals enrolled in the program were not included in the analysis: two returned to prison on supervision violations, and three died within the two year study period following release. None of these individuals had been convicted of a new crime during their time in the community.

Data on new offense convictions was from the Washington State Institute for Public Policy (WSIPP) database of court records throughout the state. The WSIPP database is updated quarterly and results are based on data current through March 31, 2008. Participants were classified as recidivists if they committed a new crime within two years of their prison release and were subsequently convicted in a court of law. Two forms of recidivism were measured:

- Any new crime (misdemeanor or felony);
- A new felony

Methods

Two recent studies in Washington State (Lovell *et al.*, 2002; Lovell, *et al.*, 2007) provide a dataset of offenders with mental illness, released from prison from 1996 – 1998. For this analysis the dataset was augmented by a group of offenders released during 1999 and 2000 for a total pool of 1,550, not including participants in the MIO-CTP and the Dangerous Mentally Ill Offender Program.³ This group of 1550 is considered to provide a baseline of treatment and outcomes prior to the initiation of specialized offender services in the state.

Using this group of offenders and following techniques applied in Lovell, *et al.* (2007), a retrospective matched control design was applied to contain the influence of confounding variables by matching MIO-CTP subjects and controls on the basis of a set of predictors of recidivism. For a detailed, technical version of the identification of control subjects, development and use of predictor variables and results of the matched control analysis see Appendix E.

Studies of general offenders and mentally ill offenders in Washington and elsewhere (Barnoski & Aos, 1999; Beck, 1997; Gagliardi, Lovell, Peterson & Jemelka, 2004;

³ There were 29 individuals in either the DMIO or MIO-CTP program who were released from prison and subsequently returned to prison and released into one of these programs. These individuals were retained in the control pool, but their status was defined in terms of their earlier release, rather than their later release into one of the special transition programs.

Gendreau, Little & Goggin, 1996; Lovell *et al.*, 2002; Lovell *et al.*, 2007) have identified a set of variables significantly correlated with recidivism. Many of these were tested against the control subject dataset to determine which subset of 7-10 variables provided optimal accuracy in predicting recidivism.

The nine predictor variables used in the matching procedure are:

- 1) Past Felonies
- 2) Drug-related offenses
- 3) Past Misdemeanors
- 4) Mental Health Residential Days
- 5) First-Time Sex Offender status
- 6) Race
- 7) Age of Release
- 8) Annual Infraction Rate
- 9) Volatile diagnosis

While several of the variables are well-established predictors of recidivism, two factors associated with lower recidivism make this set distinctive: status as a first-time sex offender, and involvement in residential mental health treatment while in prison. For this study the number of drug-related offenses appeared to be particularly potent.

For the final matching process, standardized risk scores were developed by recoding each variable into three levels, following Gagliardi *et al.* (2004) and an overall risk score calculated for each individual subject and control. Use of risk levels meant that multiple controls at the same risk level were available for each participant. A random sort was followed by a resorting according to the number of drug-related offenses, and the closest match was assigned as a mate.

Results

Results for felony recidivism and recidivism of any new offense are reported in **Exhibit 7 – Recidivism of MIO-CTP Participants and Matched-Control Mates**. MIO-CTP participants consistently show lower rates of recidivism than their mates. Participants were significantly less likely to commit a new felony within two years of release than were their control mates. The results for any new offense lie just outside the range of accepted statistical significance. Previous versions of this annual report beginning in 2005 suggested that recidivism among participants enrolled in later years had increased slightly and the results of this analysis bear this out. Results for participants enrolled prior to 2003 were more highly significant for reduced felony recidivism and any offense recidivism than for the entire group.

Exhibit 7 – Recidivism of MIO-CTP Participants and Matched-Control Mates

New Crime Level	Persons Committing New Crime (N, %)							
	Entire Group				Participants Enrolled Before 2003 ^b			
	MIO-CTP (N=92)	Control Mates (N=92)	Odds Ratio*	p	MIO-CTP (N=64)	Control Mates (N=64)	Odds Ratio*	p
Felony	27 (29%)	39 (42%)	1.75	.045	15 (23%)	30 (47%)	3.14	.005
Any Offense	41 (64%)	49 (77%)	1.47	.14	26 (41%)	37 (58%)	2.2	.003

*Control vs. MIO-CTP

The odds ratio is a statistic referring to the likelihood that matched pairs have similar outcomes. In a matched-control design, each participant-mate pair may have one of four possible recidivism outcomes: yes-yes, yes-no, no-yes, and no-no. The McNemar test used for this analysis assesses the strength and significance of differences in recidivism by comparing the number of yes-no (participant-mate recidivism) outcomes to the number of no-yes (participant-mate recidivism) outcomes. An odds ratio of 1.0 (1:1) means there is no difference between groups. To understand the meaning of the odds ratio in the above results, for example, the statistic for “Felony” recidivism for the 2003 group of 64 pairs is 3.14. Pairs with a desirable outcome (the program participant did not commit a new crime when the control mate did) were three times as common as the reversed, undesirable outcome.

Survival. Survival refers to the length of time that an individual remains in the community following release before committing any new offense. Whether MIO-CTP participants lasted longer in the community before re-offending than their matched-control mates was assessed by the Kaplan-Meier life-table analysis, which takes account of individuals who survived the entire two-year period without re-offending. For descriptive purposes, cumulative rates of re-offense were compiled at five intervals over the two-year period: 3 months, 6 months, 1 year, 18 months, and 2 years. **Exhibit 8 – Comparison of MIO-CTP Participants’ and Matched-Control Mates’ Rates of Any New Offense at Various Intervals** displays cumulative rates of recidivism over time. For a comparison the amount of time it took for one-quarter of each group to commit a new offense was 29 weeks for the matched-controls, while it took 66 weeks for the same percentage of MIO-CTP participants.

**Exhibit 8 – Comparison of MIO-CTP Participants’ and Matched-Control Mates’
Rates of Any New Offense at Various Intervals***

Period	MIO-CTP (Cumulative Rates)		Mates (Cumulative Rates)	
	N	Pct	N	Pct
First 3 Months	5	5%	12	13%
First 6 Months	8	9%	20	22%
One Year	18	20%	35	38%
18 Months	29	31%	41	44%
Two Years	41	44%	49	58%

*Log Rank Test, MIO-CTP vs. controls: $\chi^2=3.03$, $p=.041$, one-sided

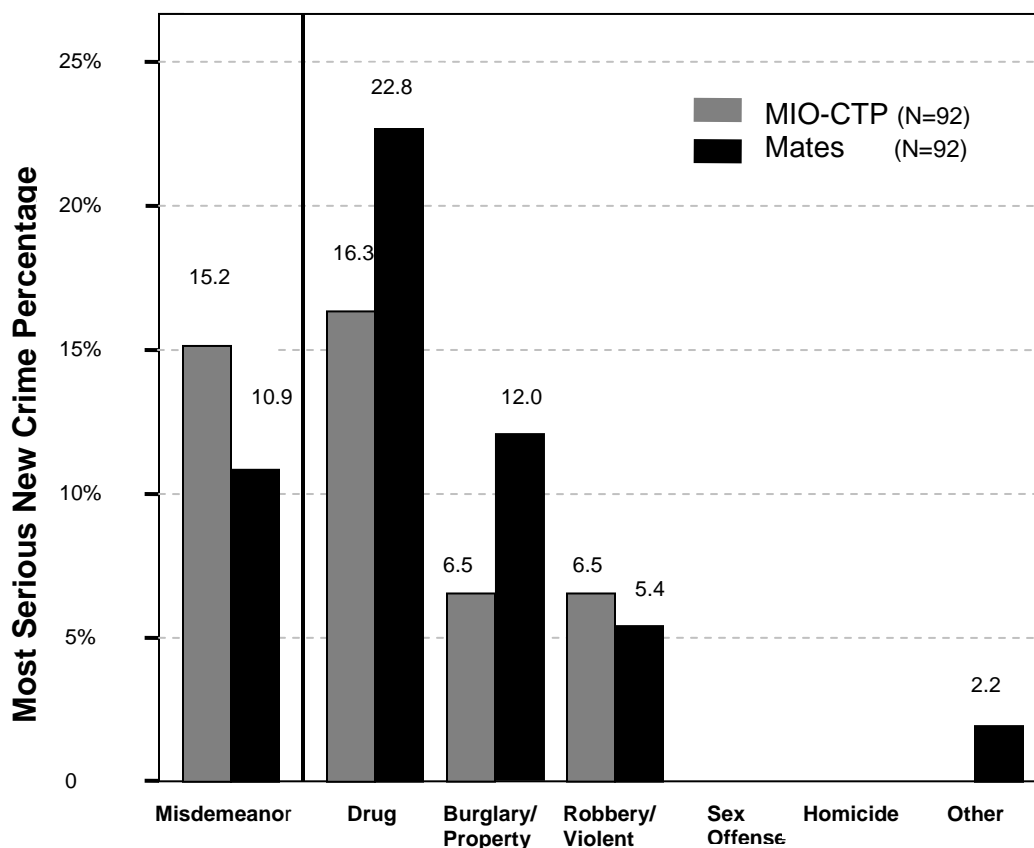
It appears that the first year of program involvement has the greatest impact on survival rates. MIO-CTP participants re-offended at less than half the rate of controls at the one year mark. However, rates for participants increased more rapidly during the second year in the community.

Type of New Crime. To further evaluate the impact of the program it is valuable to consider the kinds of new crimes being committed. A comparison of the most serious new crime committed post-release is presented in **Exhibit 9 – Types of Most Serious New Crime**. In general, the control mates were committing more serious crimes than the program participants. This is most notable in the property crimes category where the rate for controls is twice that of participants (12% vs. 6.5%.) Violent crimes against persons were roughly comparable between groups. Participants were more likely to commit a misdemeanor as their most serious new crime.

The largest differences in the types of new crimes being committed are in the more serious crimes. The rates of misdemeanors and drug offenses are relatively comparable for the MIO-CTP participants and their mates (16.0% vs. 18.5% and 17.3% vs. 18.5%, respectively.) On the other hand, property crime was the most serious new crime for only 4.9% of the MIO-CTP participants compared to 12.3% of mates. Violent offenses were the most serious new crime for only 6.2% of program participants compared to 8.6% of the matched control group.

A second useful comparison is within the MIO-CTP group between the rates of new violent crime and their index offense (**Exhibit 1** above.) More than one-third (38.3%) of index offenses were violent crimes (robbery, assault, sex offense, & homicide) compared to the 14.6% (6.5/44.5%) of new offenses.

Exhibit 9 – Types of Most Serious New Crime



Correlates to Felony Recidivism

Whether or not an MIO-CTP participant committed a new felony appears to be related to a number of characteristics evaluated at three months post-release. Three months after release a series of questions was asked of participants regarding mental health symptoms and substance use. Some were found to correlate with subsequent felony convictions. Analyses are presented in **Exhibit 10 – Symptom/Behavioral Correlates of Felony Recidivism**.

Fifty-seven participants released into the community were interviewed at three months post-release. Participants were asked if they had experienced symptoms of depression in the past 30 days. Although the correlation of responses to this question does not meet strict levels of statistical significance, a closely related symptom, having made a suicide attempt, did correlate significantly with subsequent felony conviction. Therefore, both are reported here.

Another item involving psychotic symptoms was statistically related to subsequent felony conviction. At three months post-release participants were asked how frequently they had experienced auditory hallucinations. Increased frequency of auditory hallucinations was associated with subsequent felony convictions.

Exhibit 10 – Symptom/Behavioral Correlates of Felony Recidivism

Self Reported Symptom/Behavior	Statistical Data (N = 57)	
	Statistic	Significance Level
Feelings of sadness or depression for at least two weeks in the past 30 days.	$\chi^2 = 3.45$	$p = .06$
Suicide attempt in past 30 days	$\chi^2 = 10.72$	$p = .001$
Frequency of hearing noises or voices that others do not hear.	$F = 14.06$	$p = .022$
Reported alcohol use in past 30 days	$\chi^2 = 8.08$	$p = .004$
Recognition of drug dependency in past 30 days	$\chi^2 = 14.11$	$p = .022$
Use of non-prescription drugs in past 30 days	$\chi^2 = 6.51$	$p = .011$

Self reported substance use at three months post-release was also found to be related to subsequent felony recidivism. Those who reported some use of either alcohol or illicit drugs were much more likely to be convicted of a subsequent felony. Similarly, participants who acknowledged a drug dependence problem were also more likely to be convicted of another felony.

These findings suggest that the mental health problems continue to play a role in criminal activity for these individuals. Management of psychiatric and substance abuse problems appears to be important in reducing the likelihood of further felony conviction.

Summary and Conclusions

This ongoing program evaluation of mentally ill offenders continues to support that intensive mental health case management services can effectively reduce recidivism, and reduce the seriousness of the crimes committed by this population. A study of 92 of the MIO-CTP participants released prior to January 2006 who were matched to a comparison group of mentally ill offenders on a group of 9 variables which predict recidivism, found that offenders receiving specialized mental health case management services were statistically less likely to be convicted of a new felony in the two years following release from prison.

MIO-CTP participants are a severely impaired group of individuals with histories of crimes ranging from drug offenses to murder. Nearly 40% of the index crimes were violent offenses. Demographic data and diagnostic information presented in the report indicate that nearly 50 percent of program participants were diagnosed with a psychotic disorder, and the overwhelming majority of participants (90.9%) were diagnosed as having a co-occurring substance abuse disorder, in addition to their primary psychiatric diagnosis.

In contrast to nearly non-existent pre-release services and inconsistent post-release mental health services for a well studied subsection of the comparison group, pre-release mental health planning and treatment services and post-release mental health services were delivered consistently by the MIO-CTP program. This program emphasizes treatment of co-occurring substance abuse disorders and close coordination with community corrections personnel from the Department of Corrections. Program participants averaged 9.5 hours per month of pre-release services and 15.7 hours per month of post-release services.

A close review of the recidivism outcome analysis raises some questions worthy of further discussion. While felony criminal activity was significantly lower for the MIO-CTP group, analysis of data on any crime committed post-release did not quite meet acceptable standards of statistical significance ($p = .14$ compared to the standard, $p = .05$) for the larger group of 92 in this analysis. With such small numbers for analysis and the random matching procedure, the small degree of difference in significance can easily hinge on one or two cases of recidivism. On the other hand, analysis of the participants enrolled before 2003 and their matched mates found significantly lower felony recidivism and lower recidivism of all crime among program participants. In this group participants were one-third as likely to commit a new felony as their controls. In the 2006 annual report several concerns about community and program changes were addressed. The program underwent a process evaluation review to consider factors affecting those changes and their impact on recidivism. Potential remedies were addressed and subsequently applied. Determination of the effectiveness of the program remedies will have to await future study as we are just reaching the two year recidivism assessment period since program issues were addressed.

Data from the survival analysis suggests that survival rates among MIO-CTP participants may reflect some variation from the pattern of survival for the matched comparison group. Rates of recidivism among MIO-CTP participants in the first six

months are dramatically lower for the program group (9% vs. 22%) but then begin to catch up (31% vs. 44%) by 18 months after release (see **Exhibit 9**.) It appears that the program is most effective in the early months following release. Within the first year many participants drop out of the intensive program and/or seek less intensive services. Further analysis of drop outs did not reveal any statistically important relationship between program dosage and subsequent effectiveness in lowering recidivism. However, this is a much more subtle difference to detect. It does appear that intensive services initially have a powerful effect on prevention of new crimes. There may be a delaying effect, in addition to a longer term prevention effect. Many participants move to less intensive services outside the program after one year and this may not be sufficient to maintain the lower levels of recidivism. Another explanation may be a 'novelty' effect created with the intense structure and attention in the early months of program involvement.

We continue to report a number of mental health symptoms/behavioral correlates found in the early years of the program to be related to recidivism. In interviews conducted at three months post-release, participants reported a number of psychiatric symptoms. Suicide attempts and frequency of auditory hallucinations were related to increased likelihood of felony recidivism. Similarly, participants reported a number of factors related to substance use and abuse at three months post-release. Alcohol use, non-prescription drug use, and recognition of a drug dependency problem were all associated with a higher incidence of felony recidivism. Consequently, co-occurring disorders treatment continues to be an integral part of the MIO-CTP.

The evidence supports the efficacy of intensive mental health case management services in reducing the likelihood of subsequent violent felony recidivism. Treatment of psychiatric symptoms, particularly depression, suicidal ideation, auditory hallucinations, and substance abuse appears effective in preventing further serious criminal activity among offenders with serious mental illness.

References

Barnoski, R., Aos, S. (2003). Washington's Offender Accountability Act: An analysis of the Department of Corrections Risk Assessment. Olympia, WA: Washington State Institute for Public Policy.

Beck, A. (1997). Recidivism of prisoners released in 1983. Washington, DC: U. S. Department of Justice, Bureau of Justice Statistics.

Gagliardi, G., Lovell, D., Peterson, P., Jemelka, R. (2004). Forecasting recidivism in mentally ill offenders released from prison. *Law & Human Behavior* 28(2): 133-155.

Gendreau, P., Little, T., Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology* 34 (4): 575-608.

Lovell, D., Gagliardi, G., Peterson, P. (2002). Recidivism and service use among mentally ill offenders released from prison. *Psychiatric Services* 53(10): 1290-1296.

Lovell, D., Johnson, L.C., Cain, K.C. (2007). Recidivism of Supermax Prisoners in Washington State. *Crime and Delinquency*, 53(4).

APPENDIX A: LEGISLATIVE INFORMATION

Background RCWs 71-24-450 through 71-24-460

RCW 71.24.450

This section articulates the legislative intent for the program pilot:

“Many acute and chronically mentally ill offenders are delayed in their release from Washington correctional facilities due to their inability to access reasonable treatment and living accommodations prior to the maximum expiration of their sentences. Often the offender reaches the end of his or her sentence and is released without any follow-up care, funds, or housing. These delays are costly to the state, often lead to psychiatric relapse, and result in unnecessary risk to the public.

These offenders rarely possess the skills or emotional stability to maintain employment or even complete applications to receive entitlement funding. Nation-wide only five percent of diagnosed schizophrenics are able to maintain part-time or full-time employment. Housing and appropriate treatment are difficult to obtain.

This lack of resources, funding, treatment, and housing creates additional stress for the mentally ill offender, impairing self-control and judgment. When the mental illness is instrumental in the offender's patterns of crime, such stresses may lead to a worsening of his or her illness, re-offending, and a threat to public safety.

It is the intent of the legislature to create a pilot program to provide post-release mental health care and housing for a select group of mentally ill offenders entering community living, in order to reduce incarceration costs, increase public safety, and enhance the offender's quality of life.”

[RCW 71.24.450]

RCW 71.24.455

This act authorized the five-year pilot. Funding began July 1998.

RCW 71.24.460

This act required an **Annual MIO-CTP Effectiveness Report**, each year through 2003. The reporting requirement was suspended for the 2003-2005 Biennium. It became statutorily required, again, beginning December 1, 2005.

This edition, the **2007 Annual MIO-CTP Effectiveness Report to the Legislature** covers the program period 1998-2005.

Summary of the RCWs

Specifically, the act:

- Charges DSHS to contract with a Regional Support Network (RSN) or private provider to deliver specialized services for up to 25 mentally ill offenders,
- Sets participant selection criteria,
- Specifies a set of required services,
- Creates an oversight committee composed of representatives from DSHS, DOC and a selected RSN or private provider,
- Requires DSHS, in collaboration with DOC and the oversight committee, to track outcomes and submit to the legislature a report of the services and outcomes by December 1, 1998, and annually thereafter, as necessary.

The report to the legislature is to include:

- A statistical analysis regarding the re-offense and re-institutionalization rate by the enrollees in the program
- A quantitative description of the services provided in the program
- Recommendations for any needed modifications in the services and funding levels to increase the effectiveness of the program

APPENDIX B: PROGRAM IMPLEMENTATION

Oversight Committee

As authorized by statute, the oversight committee is comprised of a representative from the Department of Social and Health Services, Department of Corrections and the King County RSN. This committee, with a rotating chairperson, operates in a collaborative manner to develop the policies and processes necessary to implement the project. The committee meets monthly to review project activities, discuss and resolve issues raised by program staff and provide project direction and oversight. A recent example of the oversight committee's work is the development of policy to prioritize persons waiting to enter the program.

Program Administration

In August 1998, DSHS contracted with the KC-RSN to develop and implement the pilot program. In September 1998, the KC-RSN sub-contracted with Seattle Mental Health and its subcontractors, Pioneer Human Services and Therapeutic Health Services, to provide the statutory required service components. The three organizations are licensed mental health and substance abuse agencies with a history of partnership in providing an integrated program of mental health, substance abuse, residential, vocational and community-based correction services.

Program Staffing

Seattle Mental Health uses a multi-disciplinary team approach to deliver integrated treatment services to a broad spectrum of participants. The agency provides services to persons with a variety of clinical diagnoses, levels of functioning and differing degrees of mental health and substance abuse issues. The program staff includes case managers, the project manager, psychiatrist, nurse practitioner, registered nurse, substance abuse assessor/counselor, and two residential house managers. Staff members have forensic and clinical experience and are skilled at exercising authority, setting limits, establishing appropriate behavioral standards and integrating supportive treatment and behavioral supervision. Most of these staff members are devoted only part-time to the pilot. The total staffing represents approximately five and one-half full time equivalents.

Participant Referral and Selection

In considering candidates for referral to the program, DOC staff evaluates mentally ill offenders against program selection criteria based on statutory mandated elements and good clinical practice.

Statutory criteria:

- The offender must suffer from a major mental illness and need continued mental health treatment.
- The offender's previous criminal history has been determined by the court or DOC to have been substantially influenced by the offender's mental illness.
- It is believed the offender will be less likely to commit further criminal acts provided ongoing mental health care.
- The offender is unable/unlikely to obtain housing and/or treatment from other sources.
- The offender has at least one year remaining before his sentence expires, but is within six months of release.

Clinical practice criteria:

- The offender is a willing participant in program services.
- The offender cannot be a Level 3 sex offender.

Candidates come from four correctional facilities known as launch sites. The Department of Corrections may transfer mentally ill offenders from other correctional facilities to these launch sites for review and consideration.

The four launch sites are:

1. Lincoln Park Work Release Program in Pierce County
2. McNeil Island Corrections Center in Pierce County
3. Monroe Correctional Complex in Snohomish County
4. Washington Correctional Center for Women in Pierce County

DOC institutional staff first screens potential candidates for the program and then refer candidates for an interview by program case managers. DOC staff prepares a comprehensive referral packet that includes the legal history surrounding the offender's crime, mental health assessments from psychiatrists and psychologists and associated clinical information for the KC-RSN. The selection committee, DOC and KC-RSN staff review all information, discuss the candidate with a launch site representative and make the selection decision. The selection of persons with a history of sex offenses or fire setting continues to be particularly problematic. There are limited options for appropriate housing or proprietors willing to accept these offenders.

APPENDIX C: PROGRAM COMPONENTS

Coordinated Pre-release Planning

The coordinated pre-release planning component has emerged as a crucial element of a participant's successful integration into the community. This phase begins after the selection committee identifies a referred person as eligible, and while the person is still incarcerated. Ideally this phase is implemented three months before the offender's release date.

Pre-release planning includes several components:

1. Convening of a multi-system team that includes the mental health provider, DOC Community Corrections Officer, prison-based DOC staff, and the chemical dependency provider (when applicable);
2. Developing comprehensive assessments and intakes that incorporate mental health and chemical dependency treatment needs and DOC community supervision requirements;
3. Creating an individualized treatment plan that includes input from the inmate and community-based providers;
4. Applying for entitlements (GAU, SSI, Medicaid) and coordinating start-up with local Community Service Offices;
5. Establishing initial appointments that coincide with the week/day of release;
6. Forming a therapeutic relationship with the offender.

After the initial meetings with the offender and prison-based DOC staff, ongoing coordination of pre-release activities is facilitated through weekly team meetings where issues such as housing needs, medication management, and chemical dependency treatment needs are discussed. The overarching goal is to provide as seamless a transition to community life as possible.

Intensive Post-release Case Management

The first week is a vulnerable time for most participants. It is well documented that participants are highly susceptible to chemical dependency relapse at this time. To mitigate this risk, participants are asked to remain at their residence during the first week, unless accompanied by a case manager or attending a nearby appointment.

On the initial release day DOC staff transports the released offender (now referred to as "the participant") to their housing. In most cases, newly released participants are initially housed at a specialized supported living facility. When the participant arrives, they are met by their case manager and introduced to the house manager. The participant's first day in the community is typically a busy one. The case manager takes the participant shopping for clothing, bedding, cooking implements, food, cleaning supplies, and

personal care items. The participant usually has an intake appointment at the DSHS Community Service Office⁴ so that financial resources can be available immediately.

The second day usually includes an appointment with a health care provider, obtaining legal identification, having a DOC community intake appointment, and meeting the program staff members who are part of the participant's team.

During the remainder of the first week, the participant typically has initial appointments with their chemical dependency treatment provider and with psychiatric services. Some participants have significant mental health symptoms and/or compromised levels of functioning; consequently, strategies are employed to assist such participants in transition to the community at a pace that is compatible with their abilities. For participants who have limited daily living skills, such as how to shop, cook, or take care of personal hygiene needs, their case manager will immediately provide coaching and skill building. For those who become confused or get lost when trying to get to appointments the case manager will walk with them until they can find their way or are no longer overwhelmed.

The intensity of the first week's activity sets the stage for implementing the ongoing services identified in the participant's individualized treatment plan. As the participants successfully achieve treatment objectives and goals, they are encouraged to become more independent by developing a transition plan which includes:

- a mapped strategy for achieving greater self-determination,
- reduction of dependence on formal systems,
- living in a less structured housing environment,
- engagement in educational and employment activities,
- Increased self-monitoring of medications.

Outreach and Engagement

For some participants, the combination of severe mental illness, past criminal behaviors and other factors, results in significant resistance to engage in the treatment and services needed to achieve individual and community stability. Some are subject to mental health decompensation, chemical dependency lapse/relapse, and/or periods when the participants' whereabouts are unknown. In these situations, program staff provides outreach and engagement services designed to establish trust in the treatment team and acceptance of services.

Staff engages the participant whether in jail, on the streets, in shelters, in hospitals, or in detention by Immigration and Naturalization Services. For some, the intensity of the program is more than they can tolerate, so enrolling them in "mainstream" services may be the best option.⁵

⁴ Financial applications are completed while the participant is still incarcerated, but face-to-face intakes are still required before entitlements can be dispersed.

⁵ The program is mandated to serve no more than 25 participants at a time, so moving some participants to less intensive services may provide an opening for participants who can benefit from intensive services.

Structured Programming

The program design incorporates attendance at a minimum of five group sessions per week. These groups are lead/co-facilitated by mental health and chemical dependency professionals and by community correction officers. Assertive mental health treatment is tailored to individual needs, and includes at least one group and one individual counseling session weekly; home visits at least two times per month and other structured activities. Counseling sessions focus on relapse prevention, and case management addresses requirements for meeting all court-ordered conditions. The team reports any violations to the community correction officer.

For participants who receive intensive outpatient chemical dependency treatment, specialized groups are provided. Participants are also encouraged and assisted to develop natural supports through Alcoholics Anonymous and Narcotics Anonymous. If participants want a faith-based connection, program staff help the participant locate a culturally appropriate faith-based community. Program staff also helps participants re-establish family connections, when appropriate.

When participants are first released, their medication compliance is monitored on a daily basis. Participants come to the clinician's office where medications are dispensed so the participant can be observed taking the medicine. Some participants are actually given a financial incentive to encourage compliance with their medication regime.

Crisis Response

Program staff and DOC Community Corrections Officers have developed a 24-hour crisis response protocol for all participants, each of whom has an individualized crisis plan that identifies risk factors, strategies that address community safety concerns, and recommended interventions. This plan is electronically available to the after-hours crisis response team, and includes access to a community corrections supervisor (for those participants who have community supervision) who may provide consultation and assistance with interventions as needed.

A number of program participants have histories of rapid decompensation that can foreshadow assaultive behavior. When this appears to be occurring, program staff immediately assesses whether voluntary or involuntary hospitalization is indicated. County designated mental health professionals often provide consultation, including crisis interventions that may mitigate hospitalization or involvement in criminal behavior. In some cases, however, hospitalization is the appropriate option.

Residential Support Services

The program continues to provide a housing subsidy up to a maximum of \$6,600 per participant per year. Seattle Mental Health contracts with Pioneer Human Services, an organization specializing in providing housing to former offenders. Most participants are

initially housed in a transitional housing facility when they are first released from prison.⁶ This facility provides onsite house management, ongoing monitoring of residents, and offices for clinical services. As the participant achieves greater community stability, they may be able to move to less structured housing, which is an important step toward further independence.

Some participants are so cognitively and/or functionally impaired that full participation in program activities is not a realistic expectation. It is particularly challenging for these participants to acquire and implement the set of skills needed to live in transitional or independent housing, i.e., shopping, cooking, and cleaning. Residential facilities that provide meals and other supports needed for activities of daily living may be a better option. Placement in such facilities allows the program team to focus on helping the participant to improve their mental health symptoms and address other immediate treatment needs. When participants achieve greater stability, acquiring activities of daily living and community living skills can then move to the forefront.

Community Safety

Community safety is a high priority for the program. The program team meets with participants a minimum of five times a week and regularly conducts risk assessments. When a participant experiences mental health deterioration that might indicate risk, a psychiatrist sees the participant on an emergency basis. Staff then closely monitor medication compliance and effectiveness, and coordinate with the psychiatrist to stabilize the participant.

The vast majority of program participants have a history of substance abuse or addiction. Relapse among these participants is of special concern, particularly when the participant has a history of engaging in criminal conduct while under the influence of substances. The program staff assesses risk to the community in each instance of relapse.

Community Supervision

The Special Needs Unit of the King County DOC office has assigned a designated Community Corrections Officer to work with the project. Although community supervision is not a requirement for program eligibility, most participants have some level of supervision. This assignment has fostered cohesiveness amongst team members, and collaboration between the treatment and community corrections systems. This collaboration enables treatment plans to assist the participant in meeting community correction requirements. Community supervision appears to have positive impact on successful reintegration due to the unique role the Community Corrections Officer plays on the participant's team.

⁶ Some participants are excluded because of their criminal history. For example, the transitional house is not accessible to those who have committed a sex offense because of its proximity to a grade school.

The Community Corrections Officer:

1. is an integral part of the treatment team,
2. has the authority to arrest/detain participants for infractions, which can provide a strong reminder to participants to comply with conditions of release and avoid re-offense,
3. can add a corrections perspective to crisis response,
4. has the authority to conduct random UA's for participants with histories of substance abuse, or when current substance abuse is suspected – this can lead to pre-emptive interventions that may preclude incarceration,
5. can conduct room searches to locate drug paraphernalia when there are concerns,
6. can make recommendations in disciplinary hearings that include input from the participant's team,
7. can enforce treatment compliance if this is a condition for release.

A particularly valuable role for the Community Corrections Officer is invoking disciplinary measures when a participant violates conditions. One effective strategy involves temporary incarceration at Lincoln Park, a DOC work release facility in Tacoma that has onsite mental health and chemical dependency counselors. The treatment team continues to work with the participant during temporary incarcerations, the participant experiences the placement as less punitive, and the community provider and facility staff are able to coordinate treatment strategies. The work release environment allows the participant to leave the facility for approved reasons while still providing a highly structured setting.

Treatment for Co-occurring Disorders of Mental Health and Substance Abuse

As integrated mental health and substance abuse treatment plays an ever increasing role in the program, Seattle Mental Health has provided two staff persons that are co-occurring disorder specialists to provide integrated mental health and drug and alcohol treatment. The program continues to adhere to an integrated approach, training the additional team members in developing a coordinated treatment plan and approach. The team members are primarily responsible for assessments, individual treatment and group leadership. Other team members focus on motivation enhancement, preventative intervention, trigger identification and encouraging the clients in their progress. Weekly team meetings and having on-site staff increases communication and promotes frequent treatment review.

There are special population concerns and characteristics for ex-offender addicts. Previous unsuccessful treatment efforts with chemically dependent offenders in transition have focused on general characteristics that this population shares with all addicts. Ex-offenders present the same entrenched denial systems, lack of knowledge of the health impact of drugs, and continued emotional entanglement with active users and codependency issues that all recovering addicts deal with. It is common for ex-offenders to quickly exit treatment programs that only address these issues.

Successful work with this group of recovering individuals includes strategies that attend to the unique characteristics of ex-offenders. Treatment strategies address:

- Immediate Use Syndrome – Most offender addicts employ fantasies of using drugs immediately upon prison release to help them cope with the daily routine of prison life. Strategies such as early intervention with offenders (assessments/individual sessions) during the pre-release phase provide a bridge to a life that is not centered on the use of substances.
- Non-Incrimination Theme – Many offenders avoid discussions about aspects of their personal or family drug use history due to long standing beliefs that discussing this information will lead to incrimination (or incrimination of loved ones) in further crimes. Strategies such as milieu treatment with ex-offenders to come to terms with their past can lead to the abandonment of denial systems.
- Overt Compliance – Some offenders have familiarized themselves with recovery jargon but do not truly attempt to make lifestyle changes. Frequent urine-analysis, family involvement, peer group feedback, and the use of non-traditional counseling techniques help participants develop a deeper understanding of drug addiction recovery.

Although the program participants represent a very small sample of ex-offenders, clear trends point to the success of the specific chemical dependency treatment strategies used with participants enrolled in the program.

Employment Services

While not all of the participants have obtained employment, the involvement of specialized vocational staff increases motivation and interest in becoming more productive. Participants have worked in such varied employment settings as construction companies, dental offices, coffeehouses and restaurants. Some have worked for private industry while others have done volunteer work as a step toward gaining marketable skills. A number of clients have pursued educational programs, such as completion of their GED, dietitian programs, and musical studies. The program connects those who may not yet be able to work or attend school with Emerald House, a clubhouse program sited at Seattle Mental Health. This is a participant run day treatment program. Additional information on employment services is presented in the Innovations section of Program Successes and Innovations, later in this report.

Transitions

The pilot project design calls for participants to transition from the intensive service level of the program to the “mainstream” publicly funded mental health system, when it becomes appropriate. Timing of transitions depends on a number of factors: whether the participant continues to have community supervision requirements; the ability of the participant to manage their mental health and/or chemical dependency issues without the intensity offered by the program; whether affordable, appropriate housing can be provided without the subsidies provided by the program; and whether the person has requested less intense services.

Terminations typically occur through a process initiated by program staff. Recommended terminations are consistent with statutory requirements and may also include other circumstances, i.e., the participant has disappeared and cannot be located or the participant is Absent Without Leave from a work release facility.

The Program Manager generally presents requests for termination to the Oversight Committee for review and discussion. The Oversight Committee considers whether the request meets statutory requirements, and makes a final determination. Program staff is strongly committed to re-establishing therapeutic relationships with those participants who are willing and able to return to the program. If a terminated participant requests readmission, they are provided with priority review for reinstatement by the Selection Committee, comprised of representatives from provider agencies and DOC.

The majority of participants who terminated from the program continue to receive mental health services through the KC-RSN, regardless of whether the participant completed the program or left prior to completion.

APPENDIX D: PROGRAM SUCCESS STORIES

Participant 1

This twenty-five year old woman entered the MIO-CTP on March 31st, 1999 following release from the Women's Correctional Center at Purdy. Her DSM-IV-TR diagnoses are 295.70 Schizoaffective Disorder; 304.80 Polysubstance Dependence; 301.9 Personality Disorder, NOS. Her criminal history included theft and drug convictions along with numerous drug and prostitution charges.

Prior to incarceration and program participation this client was heavily involved in prostitution and drug use. In the years surrounding her incarceration the client was readily known to those in the downtown corridor of Seattle as homeless and unwilling to participate in any mental health or chemical dependency treatment. Whenever incarcerated she would stabilize, but upon release would quickly revert to past behaviors. Following her entry into the MIO-CTP efforts to assist her with gaining psycho-social stability initially failed repeatedly due to her drug and alcohol activity. Although she would maintain periods of stability her behavioral cycle remained the same. The program staff did not give up on her. They reached out to her in the community, engaging her at every opportunity. Staff remained steadfast in offering assistance even though she lost housing on numerous occasions due to her behaviors.

At this time the team felt the only possibility this client had of succeeding was to remove her from the downtown corridor. Eventually the opportunity arose when the client was involuntarily hospitalized for 30 days due to grave disability. During her hospitalization, the MIO-CTP team located and secured a group home in East King County, and she was moved in directly from the hospital. The MIO-CTP team worked closely with the group home for three months to help her transition to full services at the group home. This intervention proved to be successful in helping the client maintain stability long enough not to revert to old patterns. Although she was discharged from the program she remained in services living in the group home until 2008 when she secured an out of county independent living situation. She is now psycho-socially stable and has re-integrated successfully into her community.

Participant 2

This client was a fifty year old male at the time of his referral from Lincoln Park Work Release program in Tacoma, which is one of the four referral portals to the program. The MIO-CPT team began working with this client in January of 2001. His DSM-IV-TR diagnoses are: 295.10 Schizophrenia - Disorganized Type and 304.80 Poly-substance Dependence. His criminal history included two armed robberies

His participation began with intensive daily medication, case management, and individual appointments. Even on medication he maintained fixed delusional thinking. In the Berkey House, a supervised, video monitored living facility contracted with the

program as the primary housing option for clients, he maintained a reasonable level of stability. However, post program this client would need 24/7 monitoring of his mental health symptoms if he was to remain in the community. The difficulty was in finding a facility that would accept the client given his violent crimes. The program staff was successful in finding a long-term residential treatment setting where the client still resides.

The programming team believed the client would benefit from some kind of structured activity, or employment. They connected him initially with a voluntary position and eventually he was successful in obtaining part-time employment.

The client successfully transitioned out of the MIO-CPT but choose to remain in services at Sound Mental Health. Seven years later he is mostly independent, still continuing to come for medical and case management services on a regular basis. In addition to behavioral health and employment opportunities the participant remains in contact with a family member who is a good advocate for him and plays an important role in his recovery process.

Today he continues to enjoy a significant period of psycho-social stability due to increased understanding of his mental health and more importantly, due to his own recovery efforts.

Participant 3

This individual, who was thirty-six years of age at the time of enrollment, was diagnosed with 295.70 Schizoaffective Disorder and 304.80 Poly-substance Dependence. His criminal history included Robbery, Theft and Attempted Rape.

A story of his release prior to the founding of the MIO-CPT Program illustrates the impulsive threat his individual presented. He had been released from prison without a support system in place. Within 24 hours he became intoxicated, then assaulted and attempted to rape an elderly woman at a bus stop. He was immediately re-incarcerated.

For his subsequent release he was enrolled with the MIO-CTP. Initially, he presented with significant issues of anger and aggression. In addition to regular programming he was engaged with a Sex Offender Treatment Provider (SOTP) in the community. Due to his recurrent aggression in sex offender therapy, his Community Corrections Officer (a member of his treatment team) would accompany him to treatment and sit outside of the therapy office to ensure he did not harm the therapist. The therapist seemed focused on the client's anger and the team began to question if the therapist was a good match for this particular client. When a new SOTP was added to the MIO-CPT team, the client was referred to this new staff person and his aggression soon lessened significantly to the point where the client was successfully able to complete this sex offender treatment regimen.

This participant desired to return to community college and pursue an associate degree. However the college was very reluctant to have a Sex Offender on campus with so many young students. The participant and program staff met with college officials and

developed a rigorous plan of safety and support, and he now attends a Community College where he is holding an 'A' average in his course work. He enjoys writing poetry and stories and three years ago had his first story published in the school journal. In 2005 he began writing a book about his life which eventually he would like to have published. He was assisted with finding a room in a small house which he shares with two roommates and has maintained this living situation for the last three years. He successfully completed his supervision with the Department of Corrections and transferred to less intensive services. He continues to attend and actively participate in mental health services and has remained stable in the community for several years.

APPENDIX E: TECHNICAL VERSION of METHODOLOGY and RESULTS

Methods

Two recent studies in Washington State (Lovell, Gagliardi, and Peterson, 2002; Lovell, Johnson, and Cain, 2007) provide a dataset of offenders with mental illness, released from prison from 1996 – 1998. For this analysis the dataset was augmented by a group of offenders released during 1999 and 2000 (excluding participants in the MIO-CTP and the Dangerous Mentally Ill Offender Program,)⁷ for a total pool of 1,550. Using this group of offenders and following techniques applied in Lovell, *et al.* (2007), a retrospective matched control design was applied to contain the influence of confounding variables by matching MIO-CTP subjects and controls with a set of nine predictors of recidivism.

Control Subjects. Retrospective identification of offenders with mental illness required the use of a variety of indicators in the Department of Corrections Offender Based Tracking System (OBTS): intake notes indicating potential mental illness, use of medications, diagnosis where recorded, certification of mental illness by a mental health professional, and residential mental health program residency while in prison. Two methods were used to determine inclusion into the control pool:

- Membership in the 1996-1997 Community Transition Study (CTS) (Lovell, *et al.*, 2002);
- Application of the following algorithm to OBTS data for 1997-2000:
 1. Certification of serious mental illness by a DOC mental health professional;
 2. One year or more of residential mental health treatment while in prison; or
 3. Both of the following: (a) at least 30 days of residential mental health treatment, plus (b) a qualifying diagnosis (schizophrenia, schizoaffective, Psychosis NOS, bipolar, major depression, organic thought or mood disorder, borderline personality disorder.)

These procedures yielded 1550 control subjects with strong evidence of serious mental illness.

Matching Procedures. Studies of general offenders and mentally ill offenders in Washington and elsewhere (Barnoski & Aos, 1999; Beck, 1997; Gagliardi, Lovell, Peterson & Jemelka, 2004; Gendreau, Little & Goggin, 1996; Lovell *et al.*, 2002; Lovell *et al.*, 2007) have identified a set of variables significantly correlated with recidivism. Many of these were tested against the control pool dataset to determine which subset of

⁷ There were 29 individuals in either the DMIO or MIO-CTP program who were released from prison during the 1996-2000 period and subsequently returned to prison and released into one of these programs. These individuals were retained in the control pool, but their status was defined in terms of their earlier release, rather than their later release into one of the special transition programs.

7-10 variables provided optimal accuracy in predicting recidivism. Following the method of Lovell, *et al.* (2007) continuous variables were recorded as ordinal variables with 2-3 values, using cut points which, according to previous studies, would provide significant numbers of subjects in each category and clear differences in average recidivism rates for each category. The rationale for this procedure is that relationships to recidivism are non-linear: for variables such as number of previous offenses or time in mental health programs, the precise number of offenses is not as important as whether one is a first-time, repeat, or chronically repetitive felony offender; nor is the exact number of days of program residency as important as the difference between weeks, months, and years. Using ordinally-recoded variables maximized the number of variables on which subjects and controls could be matched. To distinguish the 92 matched control subjects from the broader pool of 1,550 controls from which they were drawn, the terms “pairs” and “mates” are used.

Since the index offenses of participants were felonies, controls were matched with participants in terms of the likelihood of felony recidivism. Because not every potentially relevant characteristic could be matched, and some predictors (such as age of admission to prison and age of release) are correlated with each other, logistic regression and Receiver Operating Characteristic (ROC) analysis were used to identify an optimal set of control variables, each of which made significant contributions to a prediction equation for felony recidivism. The area under the ROC curve (AUC) describes the extent to which a set of variables yields predictions better than chance (an AUC value of .50). The variables used for this study, when recoded, showed a respectable ROC value of .76, as good as many well-established prediction instruments in this area.

Average scores (for continuously distributed variables) and rates (for categorical variables) on the nine predictor variables are presented in **Exhibit E1 – Recidivism Predictors**. While several of the variables are well-established predictors of recidivism, two factors make this set distinctive: status as a first-time sex offender, and involvement in residential mental health treatment while in prison.

Exhibit E1 – Recidivism Predictors

Variable	MIOCTP (n=92)	Mates (n=92)	All controls ^a (n=1550)	Significance MIOCTP vs. controls
1. + Past Felonies (avg)	4.30	3.95	4.07	$p = .457$
2. + Drug-related offenses (avg)	4.50	4.05	2.90	$p = .02$
3. + Past Misdemeanors (avg)	4.83	3.89	3.28	$p = .002$
4. – Mental Health Residential Days (avg)	400	183	172	$p = .000$
5. – First-Time Sex Offender (pct)	7%	12%	9%	$p = .391$
6. + African American or Native American, Asian, Pacific Islander (pct) ^a	41%	37%	29%	$p = .000$
7. – Age of Release (avg)	36.6	36.1	34.2	$p = .003$
8. + Annual Infraction Rate	2.03	2.43	2.76	$p = .018$
9. – Volatile diagnosis (pct)	41%	23%	30%	$p = .03$

Note. Variables are listed in order of univariate correlations with felony recidivism. Plus signs indicate higher values (or positive values for yes/no variables) were associated with increased rates of recidivism and negative signs indicate higher values were associated with decreased rates of recidivism. Average values between MIO-CTP participants and mates differ because continuous variables (past felonies, past misdemeanors, mental health residential time, age of release) were recoded as ordinal variables for matching and a small number of subjects were matched on overall risk rather than individual variable scores.

a. Hispanic origin was not a control variable.

Risk Scores. Continuous variables were recoded into three levels based on felony recidivism rates at each level, with cut-offs designed to create clear differences in recidivism rates between levels. The range of values for cut points corresponding to the nine predictor variables is presented in **Exhibit E2 – Prediction Variable Ranges, Risk scores, and Recidivism Rates.** Following Gagliardi *et al.* (2004), risk scores of –1, 0, or 1 were assigned to each ordinal value to reflect rates of recidivism that were lower, approximately equal, or higher compared to the entire control pool of 1550 subjects (the two-year felony recidivism rate for all controls was 42%).

Felony risk scores were computed in two stages:

1. First, a total risk score was calculated by summing raw scores on the individual variables and adding 8 points to ensure that all totals were positive.
2. Due to small numbers and random variations, causing small differences or slight fluctuations in recidivism rates between some scores (e.g., 14 through 17), the raw totals were rescored into a 10-point scale reflecting differences in recidivism.

Exhibit E2. Prediction Variable Ranges, Risk Scores, and Recidivism Rates for Control Subjects (N=1550).

Variable	Range	Raw Risk Score	New Felony Rate
Previous Felonies	0-1	-1	16%
	2-5	0	44%
	6+	1	61%
Previous drug-related offenses	0	-1	32%
	1	0	41%
	2+	1	55%
Previous Misdemeanors	0	-1	22%
	1-2	0	43%
	3+	1	55%
Mental health residential time	0	1	50%
	1-30	0	46%
	31+	-1	38%
First Time Sex Offenders	Yes	-1	12%
	No	1	45%
Racial Classification	White	-1	36%
	Person of color	1	56%
Age of Release	<30	1	49%
	31-39	0	44%
	40+	-1	30%
Annual Infraction Rate	0-1	-1	34%
	1+	1	48%
Volatile diagnosis	No	0	39%
	Yes	1	48%

Exhibit E3 – Felony Risk Scores & Recidivism Rates for Control Subjects displays the final risk scale and corresponding felony recidivism rates.

Exhibit E3 - Felony Risk Scores & Recidivism Rates for Control Subjects (N=1550)

Final Risk Score	Control N	Recidivism Rate
1	39	9%
2	75	4%
3	134	9%
4	109	16%
5	137	29%
6	118	36%
7	167	43%
8	92	47%
9	169	55%
10	410	68%
Total	1550	42%

Matching Participants to Mates. Final risk scores were used to match controls to MIO-CTP participants. Use of risk levels rather than a combination of individual variable scores meant that multiple controls at the same risk level were available for each participant. For each participant, the list of risk-level matched controls was first sorted randomly and then resorted by the difference between the participant and control on the number of drug-related offenses, and the closest match was assigned as a mate.

Because of low numbers, the less-than-optimal level of predictive accuracy with a two-year outcome period, and the random nature of the mate assignments, results of the matching procedures were not stable. The lack of stability applied whether mates were selected in terms of individual variable matching as in 2007, with risk-levels used for the mismatches, or directly in terms of risk levels. To mitigate the role of instability in our results, the matching procedure was run 25 times: each trial generated data about felony recidivism rate in the matched control group (which ranged from 35% to 45% in the 25 trials), and compared the individual matching variables between participants and potential mates. Selection of one of the 25 possible matching trials was blind to the final comparison of outcomes, which depends on the particular recidivism outcomes of the participant-mate pairs.

The matching applied in this report displayed the closest similarity between participants and mates in the most highly predictive variables. The recidivism rate among mates, 42%, though similar to the rate in the overall control pool, was slightly higher than the 40% average of the 25 trials. Nevertheless, as demonstrated in **Exhibit E1 – Recidivism Predictors**, control mates had lower scores than participants on variables

such as previous felonies that are strongly associated with recidivism, and more of them were first-time sex offenders, which is negatively associated with recidivism. The principal risk advantage of participants consisted of longer stays in mental health residential programs.

Results

Results for felony recidivism and recidivism of any new offense are reported in **Exhibit 8 – Recidivism of MIO-CTP Participants and Matched-Control Mates**. MIO-CTP participants consistently show lower rates of recidivism than their mates. Participants were significantly less likely to commit a new felony within two years of release than were their control mates. The results for any new offense lie just outside the range of accepted statistical significance. Previous versions of this annual report beginning in 2005 suggested that recidivism among participants enrolled in later years had increased somewhat and the results of this analysis bear this out. Results for participants enrolled prior to 2003 were more highly significant for reduced felony recidivism and any offense recidivism than for the entire group.

Exhibit E4 – Recidivism of MIO-CTP Participants and Matched-Control Mates

New Crime Level	Persons Committing New Crime (N, %)					
	Entire Group ^a			Participants Enrolled Before 2003 ^b		
	MIO-CTP (N=92)	Control Mates (N=92)	Odds Ratio*	MIO-CTP (N=64)	Control Mates (N=64)	Odds Ratio*
Felony	27 (29%)	39 (42%)	1.75	15 (23%)	30 (47%)	3.14
Any Offense	41 (45%)	47 (53%)	1.47	26 (41%)	37 (58%)	2.2

*Control vs. MIO-CTP

- a. Felony McNemar Test, $\chi^2=2.75$, $p=.045$
- Any offense McNemar Test, $\chi^2=1.17$, $p=.14$
- b. Felony McNemar Test, $\chi^2=6.80$, $p=.005$
- Any offense McNemar Test, $\chi^2=3.50$, $p=.003$

The odds ratio is a statistic referring to the likelihood that matched pairs have similar outcomes. In a matched-control design, each participant-mate pair may have one of four possible recidivism outcomes: yes-yes, yes-no, no-yes, and no-no. The McNemar test used for this analysis assesses the strength and significance of differences in recidivism by comparing the number of yes-no (participant-mate recidivism) outcomes to the number of no-yes (participant-mate recidivism) outcomes. An odds ratio of 1.0 (1:1) means there is no difference between groups. To understand the meaning of the odds ratio in the above results, for example, the statistic for “Felony” recidivism for the 2003 group of 64 pairs is 3.14. Pairs with a desirable outcome (the program participant did not commit a new crime when the control mate did) were three times as common as the reversed, undesirable outcome.

APPENDIX F: COMPARABILITY OF MENTALLY ILL OFFENDER-COMMUNITY TRANSITION PROGRAM and COMMUNITY INTEGRATION ASSISTANCE PROGRAM

The Mentally Ill Offender-Community Transition Program (MIO-CTP) and Community Integration Assistance Program (CIAP) [previously known as the Dangerous Mentally Ill Offender—DMIO] programs are both legislatively mandated programs charged with developing post release mental health, intensive case management, chemical dependency, and other services to mentally disordered offenders being released from the Department of Corrections (DOC) facilities. Both programs are designed to reduce incarceration cost through reduction of recidivism, increase public safety and improve mentally offender's chances of success in the community. They are both voluntary programs except to the degree that DOC has authority to establish conditions on the participants. Most participants are under DOC supervision but not all. The funding for services is directed through the Mental Health Division (MHD), Department of Social and Health Services (DSHS), but both programs are highly coordinated by DSHS and DOC, and services are provided by community mental health, chemical dependency, developmental disabilities providers and DOC Community Corrections officers

The MIO-CTP is authorized as a pilot program by RCW 71.24.455 (1997) to provide a broad array of services, including housing, for a group of up to twenty five seriously mentally ill offenders. Administration is provided by, Mental Health Division under contract with King County Regional Support Network and its sub-contractors. This program exists only in King County. MIO-CTP funding is from the MHD Federal Block Grant at approximately \$18,000-\$20,000 per participant per year, with a minimum of \$6,600 per participant dedicated to housing. Program participants are selected for the program utilizing specific selection criteria based on the statutorily mandated elements and good clinical practice. (See Appendix B for this list.) Candidates are referred from four correctional facilities or "launch sites" and screened by the Department of Corrections for program appropriateness. A multidisciplinary selection committee reviews all candidates and makes selection decisions. The legislature changed the funding source from a state only appropriation to a budget proviso requiring the use of Mental Health Division Federal Block Funds in 2005.

CIAP is authorized by RCW 71.24.470 (1999) to identify dangerous mentally disordered offenders and to provide them additional mental health and chemical dependency treatment and other needed services. CIAP is a statewide, state funded program implemented by the MHD, DSHS through contracts with Regional Support Networks and community mental health providers across the state. Annual funding is approximately \$9,000 -\$10,000 per participant and, by statute, CIAP funding must supplement and not supplant Medicaid or other funding that the participant may be eligible for. A potential candidate cohort is identified by DOC using an algorithm which includes mental health needs scores, mental health bed residency, level of medical needs, and recorded diagnosis. DOC staff reviews this cohort and identifies likely candidates. DOC staff prepares relevant mental health, chemical dependency and

criminal information and presents it to an inter-agency Multidisciplinary Statewide Review Committee for possible inclusion into the CIAP. The Multidisciplinary Statewide Review Committee makes the final selection.

Distinguishing features between the programs include:

- Level of dangerousness. CIAP is designed for dangerous offenders while MIO-CTP excludes those judged to be most dangerous.
- Area served: CIAP is designed to be a statewide program while the MIO-CTP is limited to offenders from the Seattle area.
- Funding: CIAP is funded by a specific state-only allocation at approximately \$10,000 per participant while the MIO-CTP is funded through the MHD Federal Block Grant at approximately \$18,000 - \$20,000 per participant.
- Housing: The MIO-CTP legislation specifically provides authorization for a housing subsidy of up to \$6,600 per participant per year. While the CIAP funds can be used for housing there is no specific housing subsidy for this program.
- Outcome studies: Both programs have legislatively mandated outcome studies but with some differences in specific requirement and from different sources. DSHS is required to provide an annual report to the legislature on MIO-CTP and the Washington Institute for Public Policy is funded to provide several specific reports on the CIAP.