

ASL

CR sent
4-16-87

MF 1

DEPARTMENT OF CORRECTIONS

CHASE RIVELAND
SECRETARY



SUBSTANCE ABUSE TREATMENT PROGRAM EVALUATION

NOVEMBER 1986

OFFICE OF PROGRAM DEVELOPMENT

104059

U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by

Washington State Department of
Corrections

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

WASHINGTON STATE
DEPARTMENT OF CORRECTIONS

SUBSTANCE ABUSE TREATMENT PROGRAM EVALUATION

OFFICE OF PROGRAM DEVELOPMENT
PLANNING AND RESEARCH UNIT

NCJRS

JAN 14 1987

NOVEMBER 1986

ACQUISITIONS

TABLE OF CONTENTS

	PAGE
Executive Summary	iii
Acknowledgements	vii
Introduction	1
Literature Search	6
Methodology	12
The Control Group	20
Process Evaluation	35
Conclusions and Recommendations	57

LIST OF TABLES AND FIGURES

	PAGE
Table A Monthly Total Releases and Early Releases	
Prior to April 1984	18
Figure 1 Types of Substances Abused	20
Table 1 Age Group by Substance Abused	21
Table 2 Race by Substance Abused	22
Figure 2 Race by Early Release and Scheduled Release	23
Table 3 Offense Type	24
Figure 3 Substance Abused by Offense Type (Including Parole Violations)	25
Table 4 Offense Type by Type of Release	26
Table 5 Offense Type by Type of Release (Excluding Parole Violations)	26
Figure 4 Prior Incarcerations	27
Table 6 Mean Prior Incarcerations by Non-Abusers and Substance Abusers	28
Table 7 Prior Incarcerations by Type of Release	28
Table 8 Total Infractions Committed by Type of Infraction	29
Table 9 Abuse Patterns and Total Infractions	30
Table 10 Abuse Patterns and Substance-Use Infractions	30
Table 11 Substance Abused and Substance-Use Infractions	31

TABLE OF CONTENTS
LIST OF TABLES AND FIGURES
(CONTINUED)

	PAGE
Table 12 Type of Release and Total Infractions.....	32
Table 13 Type of Release and Substance-Use Infractions	32
Table 14 Statewide Program Movement	36
Table 15 Catchment I: CCCC Program Movement	37
Table 16 Catchment II: PCCW and MICC Program Movement	37
Table 17 Catchment III: WSR and IRCC Program Movement	38
Table 18 Catchment IV: WSP Program Movement	38
Table 19 Catchment IVA: PLCC Program Movement	39
Table 20 Reasons for Non-Completion by Treatment Center	40
Table 21 Time in Prison After Program Admission	41
Table 22 Time in Prison After Program Admission: Not Released as of September 30, 1985	42
Table 23 Reported Level of Chemical Dependency: Percentage by Treatment Center	44
Figure 5 Racial Distribution: Control Group and Program Participants	46
Table 24 Distribution of Sex Within Control Group and Program Participants	46
Table 25 Length of Stay by Sex: Control Group and Program Participants	47
Figure 6 Offense Type by Population Type (Excluding Early Releases)	48
Table 26 Program Hours by Catchment	49
Table 27 Program Hours by Treatment Center	49
Table 28 Average Hours by Treatment Center	50
Table 29 Average Hours for Completions	51
Table 30 Average Hours for Program Completions and Drops	53
Figure 7 Program Lengths and Intensity for Completions by Treatment Center	54
Table 31 Percent of Admissions Completing Treatment	55

EXECUTIVE SUMMARY

SUBSTANCE ABUSE TREATMENT: A PROGRAM EVALUATION

Early in 1984, at the behest of the Washington State Legislature, substance abuse treatment programs were initiated for some inmates of the Department of Corrections prison system. The criteria for treatment selection were:

- o in need of treatment, and
- o within one year of release.

Only rough estimates of the numbers who might be in need of treatment were available. Nevertheless, DOC was determined to provide the best treatment possible to the largest number of abusers. To that end, the state prison system was divided geographically into four Catchments--three on the west side of the state, one on the east.

Certified treatment agencies (one for each Catchment) were awarded contracts to provide services. The contractor for the eastern Catchment subsequently sub-contracted with another agency for a portion of their service area (resulting in the creation of Catchment IVA). Primary treatment centers were specified for each Catchment:

- o Catchment I Cedar Creek Corrections Center,
- o Catchment II McNeil Island Corrections Center and
Purdy Corrections Center for Women,
- o Catchment III Washington State Reformatory and
Indian Ridge Corrections Center,
- o Catchment IV Washington State Penitentiary,
- o Catchment IVA Pine Lodge Corrections Center.

The Planning and Research Unit undertook the tasks of estimating the size of the "in need" population, monitoring the treatment process, and identifying indicators of treatment success.

Estimation of the "in need" population was accomplished by examining the records of a sample (265) of inmates released in the four months prior to the start of treatment services. The sample represented 27 percent of the releases in that quarter -- approximately 10 percent of the annual releases. Over 80 percent of the sample were found to have histories of substance abuse problems. From this percentage we can conclude that some 2,000 inmates will constitute the annual target population for treatment.

Control group data were analyzed for substance abuse related variables. Neither demographic data nor criminal history data (type of crime or number of prior incarcerations) distinguished abusers from non-abusers. This lack of correlation between prior incarcerations and substance abuse strikes to the core of the findings in a literature review. Substance abuse may correlate with crime. It has not been shown to be causal.

Infraction rates for the control group sample were interesting. . . both for relationships found and relationships not found.

- o Abusers had more substance-use related infractions than non-abusers.
- o Drug abusers had more substance-use related infractions than alcohol abusers did.
- o Abusers did not have more total infractions than non-abusers.
- o Age was not a factor in substance-use infractions.

Legislative attempts to reduce prison overcrowding (HB 888, Early Release Act of 1983) could have resulted in a biased sample for the control group. Candidates for Early Release were offenders:

- o convicted of nonviolent felonies,
- o with fewer infractions while incarcerated, and
- o within one year of their scheduled release date.

Fortunately, these specificities had no bearing on substance abuse. The proportion of abusers was the same among the early release parolees and those released at their regularly scheduled dates. Since type of crime was not related to substance abuse, the fact that the early releases were predominantly property offenders had no influence on

the control group. Nevertheless, the number of early releases in the control group required some adjustment of the data when comparing infraction rates between that group and the program participants.

Turning to the processes of the substance abuse treatment program, 774 persons were admitted in the first year of operation. All were screened with standardized assessment instruments prior to admission.

From test scores (and professional judgements of treatment staff) the accepted participants were categorized on a scale of 1 to 4. The lowest category indicated "no problem;" the highest "late stage dependency." More than 90 percent of the treatment participants were identified as having chemical dependency problems. Approximately 8 percent were split evenly between "no problems" and "unknown." Several things may have contributed to this latter percentage:

- o undue haste in initial selections,
- o initial unwillingness of treatment staff to "label" offenders, and
- o inappropriate referrals from prison staff.

Whatever the cause, the incidence of "no problem" and "don't know" declined over time.

Looking at possible biases in program provision, women were overrepresented in the treatment population. Less than 6 percent of the annual releases are women. More than double that percent were included in the treatment program. Logistically, this is a difficult problem to correct. If there is a full time program offered at Purdy, there will be overrepresentation. The alternative of no program is unacceptable. This incidental sexual discrimination was the only discrimination found in the provision of program services. The distributions of race, age, and type of offense were comparable to the control group.

Analysis of service hours provided to those who completed indicated substantial differences between the programs provided in the different Catchments. A high of 13.3 hours per treatment week at Cedar Creek Corrections Center and a low of 1.4

hours per treatment week at McNeil Island were noted. These differences will provide an opportunity for at least a quasi experimental analysis of service hours relative to recidivism. This will be discussed in a forthcoming report, "Outcome Analysis of Substance Abuse Treatment Programs."

Statewide the contractors provided 4,101 hours of individual counseling and 22,389 hours of group education and treatment. Of the 774 admissions to the program, 570 (74 percent) completed treatment--nearly four times the expected completion rate.

ACKNOWLEDGMENTS

The completion of this project was due to the combined efforts of the following:

PROJECT STAFF

Joan Hall-Milligan, Principal Staff
Research Investigator
R. Peggy P. Smith, Planning and Research Manager
Ward White, Research Analyst
Linda Howell, Research Analyst
Cary Dizon, Research Analyst
Tracy Guerin, Clerk Typist

We wish to express our thanks to the Division of Prisons staff responsible for the coordination of the reporting process and interpretation of program content:

Division of Prison

Robert R. Jones, Assistant Director
Kathy Gookin, Correctional Program Manager
Jack Buchanan, Correctional Unit Supervisor
Willie Daigle, Correctional Unit Supervisor
Sandra Silver, Correctional Unit Supervisor

Special thanks to Justus Freimund for his contribution to the research design and hours of editing, and to the Word Processing Center staff who saw us through the many revisions.

Last, sincere thanks to the many who took time to read through the rough draft and furnish us with appreciated feedback.

CHAPTER ONE

INTRODUCTION

The Washington State Legislative Budget Committee published a Performance Audit of the Department of Corrections (DOC) in December 1982. Among other deficiencies, such as overcrowding in the state prisons, it was noted that no system-wide rehabilitative substance abuse programs were available to offenders in need of such services.

Substance Abuse Report, published by DOC in February 1983, spoke to these concerns. Analysis of a random sample of 228 inmates indicated that 90 percent had histories of substance abuse. As a result of this analysis and a review of the substance abuse treatment literature, DOC recommended:

Assisting offenders, through self analysis, to identify personal substance abuse problems;

Encouraging increased volunteer programs within the prisons for the inmate population and within the community for parolees and probationers; and

Subsidizing community based treatment programs, up to a maximum of two hundred dollars per offender, for those desiring inpatient or outpatient treatment.

The legislature rejected the idea of community based treatment in favor of the Legislative Budget Committee's recommendation for treatment within the institutions. An appropriation was set aside in the amount of \$712,000 to accomplish these recommendations. DOC was directed to give attention to those offenders within one year of release who were identified by professionally trained and certified staff as in need of substance abuse treatment. Administration of the appropriated funds was given to the Division of Prisons (DOP), along with the responsibility to develop and implement the program as soon as possible.

Because the development of a data base which would estimate the number of offenders in need of treatment, in addition to an evaluation of program effectiveness, were inherent in the Legislative Budget Committee recommendations, DOP requested the services of the Office of Program Development research unit. Working together, DOP and Program Development established the following goal and objectives to generally describe DOC expectations for the substance abuse treatment program.

Goal: To provide effective drug and alcohol rehabilitation programs at state correctional institutions to inmates who are in need of such treatment and have less than one year remaining in their confinement.

Objectives:

1. Provide services to the maximum number of inmates possible.
2. Assure program effectiveness.
3. Provide treatment services of equal or better quality than is available in an outpatient clinic.
4. Assure that service providers meet all contract provisions.

Object 4 is a reflection of the fact that after assessing the resources available within DOC, it became evident that there were insufficient numbers of qualified substance abuse counselors on the staff. Time restrictions precluded the possibility of hiring and training project staff. Therefore, the decision was made to contract services from providers certified by the Bureau of Alcohol and Substance Abuse (BASA) in the Department of Social and Health Services (DSHS).

The number of diverse institutions involved and the difficulty of providing quality services for each one prompted DOP to divide the state into four Catchment Areas; three in the western half of the state, where most of the prisons are located, and one in the eastern half. The plan was to designate one or two facilities in each Catchment as primary treatment centers. The remaining institutions would form a pool from which offenders meeting the selection criteria might be transferred.

Attention then focused on more explicit program expectations to be included in a Request for Proposal (RFP). At a minimum, program providers would be required to provide screening and assessments, as well as group and individual counseling. Programs were expected to attain a completion rate of 20 percent of those entering the program and to coordinate with other state agencies or private organizations for follow-up services as needed. All programs were to be certified by BASA by January 1, 1984.

The RFP was published in mid-December 1983. A prospective contractor was permitted to bid to provide services in the entire state, a combination of Catchment Areas, or a single Catchment. In actuality, four separate contractors were selected on January 20, 1984. Although with varying degrees of emphasis, all successful bidders focused on recovery, recognition of relapse, and the development of social skills. The latter included communication skills, assertiveness training, and grief and anger management. An information segment of each program was to deal with the addictive properties of various drugs and alcohol.

Catchment I comprised the Washington Corrections Center (WCC) at Shelton, the Olympic/Clearwater Corrections Center (O/CCC) near Forks, Larch Corrections Center (LCC) near Vancouver, and Cedar Creek Corrections Center (CCCC) near Olympia. CCCC was the primary treatment center. The contract was let to Social Treatment Opportunities Program (STOP) of Thurston County. STOP had had no prior experience with substance abuse treatment in prisons. Nevertheless, they proposed a sound program and had a strongly qualified staff. STOP proposed a relatively structured, formalized program, six weeks in length, with no new admissions during that period.

Catchment II covered McNeil Island Corrections Center (MICC) and Tacoma Work/Training Release, both near Steilacoom, Purdy Corrections Center for Women (PCCW) near Gig Harbor, and Firland Corrections Center (FCC) in Seattle. Both MICC and PCCW were selected for primary treatment centers. The contract was awarded to Small Tribes of Western Washington (STOWW), a Native American treatment program that had been active on a volunteer basis at MICC for a number of years. STOWW proposed a less formal structure and a somewhat different philosophy. As was made clear in their proposal, community based rehabilitative programs were

considered to be a more desirable form of treatment. Their plan was to spend 70 percent of their time on preparole planning and referral to appropriate inpatient or outpatient treatment. The remainder of the time was to be divided between group education and counseling. Approximately twelve hours per individual were to be provided over a period of from six to eight weeks. Intake was designed on a flow basis with offenders starting anywhere along the line and completing at their own pace. Individual counseling was to be offered on request. Survival skills classes were available through community college resources at both PCCW and MICC. The latter also provided substance abuse education. Rather than elaborate on or compete with these, STOWW proposed that their staff would make appropriate referrals to those classes.

Catchment III included the Washington State Reformatory (WSR) and the Washington State Reformatory Honor Farm (WSR Honor Farm) near Monroe, the Special Offender Center (SOC) and Twin Rivers Corrections Center (TRCC) also located near Monroe, and Indian Ridge Corrections Center (IRCC) near Arlington. The Honor Farm and IRCC were designated treatment centers for this Catchment, and the selected contractor was Center for Human Services (CHS), an agency with considerable experience in corrections. Like STOP, CHS proposed a relatively structured program to be completed in eight weeks.

Catchment IV incorporated Washington State Penitentiary (WSP) in Walla Walla and Pine Lodge Corrections Center (PLCC) near Spokane as designated treatment centers. Geiger Work/Training Release, near PLCC, rounded out the Catchment. The Community Alcohol Center (CAC) of Walla Walla was the successful bidder for Catchment IV. Due to the geographic separation of the two treatment centers, however, they subcontracted with Substance Treatment, Education and Prevention Programs of Spokane (STEPPS) to provide treatment services at PLCC plus screening at Geiger Work Release. CAC proposed a three part program starting with alcohol and drug education, followed by social skills and, finally, group or family therapy, to be completed in twelve weeks. Individual counseling was to be scheduled after the initial education component and to continue through the remaining program period. CAC had provided services at WSP in previous years and was familiar with both the facility and the population. STEPPS agreed to provide screening at both PLCC and Geiger as well as furnish both individual and group services at the primary treatment center.

DOP management of the programs consisted of coordination and monitoring of program services as well as information flow. This was accomplished with the hiring of one additional Correctional Unit Supervisor for each of three Catchments and one Correctional Program Manager. The Correctional Program Manager not only served as senior supervisor for all Catchments but acted in the Correctional Unit Supervisor capacity for Catchment I. The responsibilities of these individuals included facilitating interaction between program staff and institutional staff as well as assisting in the identification of qualified offenders. The program management staff also played an important role in assuring that the data needed for this evaluation reached the research unit in a timely and useful manner.

CHAPTER TWO

LITERATURE SEARCH

The literature search done during the course of the Substance Abuse Treatment Program Evaluation took advantage of an earlier review done in conjunction with the Department of Corrections (DOC) 1983 Substance Abuse Report. For that search, the National Institute of Corrections Information Center provided articles from their 75,000 literature references and from the National Criminal Justice Reference Service, as well as from Department of Defense and Lockheed reference files. The current search goes beyond the 1983 effort by extending the literature review into non-corrections areas. Literature suggested by individuals in the substance abuse treatment community, as well as resources provided through the Washington State Library Reference Service, were reviewed.

Although, as noted in the 1983 Report, the relevant literature is surprisingly sparse, it was helpful in shaping the approach taken in the Substance Abuse Treatment Program Evaluation.

There is no doubt that substance abuse represents a substantial problem in the correctional system. In the National Institute on Drug Abuse 1981 study "Drug Abuse and Treatment in Prisons," it was reported that 30 percent of the inmates in the prisons that responded to a 50 state and District of Columbia survey had some history of heroin use. An estimated 61 percent had used illicit drugs at some time during their lives. A New York State May 1982 "Profile of Male Offenders With Suggested Alcohol Abuse Problems Based on MAST (Michigan Alcohol Screening Test) Scores," suggested that 35 percent of male new commitments to prison have abuse problems.

The Washington State Department of Social and Health Services (DSHS), and in later years DOC, presented evidence of substantial substance abuse problems among the inmate population. A Study of Drug/Alcohol Abuse Among Residents of Washington Correctional Facilities, DSHS Office of Research, 1977, indicated that 61 percent of surveyed inmates had reported that they were intoxicated on alcohol at least once or twice a week prior to arrest. Sixty six percent reported they had used drugs the year prior to arrest. A follow-up study, Report: An Analysis of Program Needs of Prison Inmates in Washington State, published by the DSHS Analysis and Information Services

Division in 1980 (data collected in 1979), confirmed these results. The inmates surveyed in 1979 self-reported that 55 percent had been intoxicated on alcohol at least once a week and 66 percent had used drugs in the year prior to arrest. The study described in the DOC 1983 Substance Abuse Report found a high incidence of substance abuse problems, but without relying on inmate self-reporting. Data were taken from case records of a sample of offenders admitted to the department between October 1, 1981 and September 30, 1982. It was found that 65 percent of the inmates in the sample were under the influence of some type of substance when they committed the crime for which they were admitted.

Although the incidence of substance abuse problems among prison inmates is high, and there is wide-spread acceptance of a link between substance use and consequent criminal activity, the literature does not support a causal relationship. For example, the empirical evidence cited in the 1982 National Institute Drug Abuse report Criminal Justice Clients in Drug Treatment indicates that successful treatment of an offender's substance abuse problem will reduce the likelihood or level of further criminal behavior. It does not, however, establish a causal link between substance abuse and criminal behavior or incarceration. Erik Meyer's discussion of "American Heroin Policy," in the Drug Abuse Council 1978 document The Facts About Drug Abuse, points out that recent evaluations of treatment programs for heroin users show only marginal effects in reducing crime rates for enrolled offenders. Meyers suggests that a substantial doubt about the ability of substance abuse treatment to reduce crime leaves humanitarian concern as the chief reason for treatment.

An article by Joan McCord, "Alcohol in the Service of Aggression" in Alcohol and Violence, describes a long-term study done to evaluate the relationship between aggression, including criminal activity, and alcoholism. A complex relationship between early (childhood) aggressive behavior, alcoholism, and criminal activity was found. Slightly under half of the alcoholics in that study were classed as aggressive youngsters; as men they were more likely than less aggressive alcoholics to be convicted for serious criminal behavior. They were more likely than nonalcoholics to commit violent crime. The intentional nature of the crimes for which these aggressive alcoholics had been convicted suggested that at least some of them used alcohol to permit the expression of their aggression.

The effectiveness of substance abuse treatment, even for individuals who do not demonstrate criminal behavior, and the relative effectiveness of different types of treatment have long been controversial topics. A series of studies done by the Rand Corporation for the National Institute of Alcohol Abuse and Alcoholism in recent years has laid much of the controversy to rest. In the first report, published in 1976, treatment outcomes were compared for a random sample of 1,340 adult male clients. The main objective of the study was to trace the natural sequence of events in the course of alcoholism for those clients, as opposed to experimentally analyzing alternative treatment modes, although several different treatment modes were used. Differential outcomes were evaluated in terms of the following "remission" categories: abstinence for 6 months, abstinence for 1 month, normal drinking, and nonremission. Follow-up analysis showed a remission rate of nearly 70 percent (20 to 25 percent above what would be expected from no treatment).

There were few notable differences among remission rates for the various treatment modes analyzed in the first Rand study. The authors considered the hypothesis of client-treatment interactions (a theory that holds that there are certain treatments that are uniquely successful when "matched" to the needs of certain types of clients) as an explanation for the uniform treatment outcomes. This was rejected, however, given the follow-up analysis evidence which suggested that "matches" of client types to treatment types do not produce improved remission rates.

The second Rand report, published in 1980, concentrated on a subsample of the original 1,340 clients and a 4 year follow-up analysis. In this study, instead of defining client status in terms of "remission" categories, problem status was noted: alcohol dependence, adverse consequences of drinking, or no problem. Once again, the Rand authors failed to find a correlation favoring one type of treatment (inpatient or outpatient) over another.

Conclusions reached in the Rand studies that are particularly relevant to the Department of Correction program are:

- Unstable, low-socio-economic status, or severely impaired alcoholics have lower than average remission rates.
- There is a modest correlation between the amount of treatment and follow-up condition.

- There is no correlation favoring one particular type of treatment over another.

The Rand Corporation determination that treatment success is not directly correlated to treatment type is supported by a number of other studies that form the foundation for the State of Illinois, "General Planning Principles for Alcoholism Services, 1982." Three other themes that appear to be widely accepted by researchers and persons delivering services are:

- The factors which most strongly predict the outcome of treatment are the demographic characteristics of the client.
- The provision of some treatment results in better outcomes than no treatment.
- Participation in aftercare services is related to better outcomes.

When treating criminal justice offenders, particularly incarcerated offenders, there are severe constraints placed upon treatment programs. Several of them would tend to dampen expected outcome success. With complete awareness of relevant constraints, in 1977 the American Correctional Association published recommendations for institutions setting up drug abuse treatment programs. The following recommendations are taken from the National Institute of Law Enforcement and Criminal Justice article, "Drug Programs in Correctional Institutions."

- Clear and obtainable goals and objectives must be established.
- Community resources must be fully utilized.
- Programs must work to change the environment as well as the individual through the use of separate unit programming.
- The etiology of drug abuse is diverse; therefore, content of the program must be considered as carefully as the context.
- Treatment must always be voluntary.
- Staff should be carefully screened and selected.

- o There must be continuity of service between institutional programs and after-care programs within the community.

There was a surprising lack of information available on prison-based substance abuse treatment programs. The literature that was available concentrated on programs provided in "therapeutic communities" rather than a more traditional outpatient approach. The article "Lantana: A State Prison...A Therapeutic Community" described a program established in a wing of a state hospital operated as a drug abuse program by the Florida State Department of Corrections. The effectiveness of this program was compromised by the severe overcrowding that the Florida system experienced as the program was being established.

The Cornerstone Program carried out in Oregon, as reflected in the reports "Correctional Treatment Programs: Progress Report, September, 1979 -March, 1981" and "The Cornerstone Program: A Client Outcome Study of Chemically Dependent, Recidivist Offenders Treated in an Intensive Treatment Program, October 1984," appeared to be quite successful. The outcome evaluations discussed in these reports were designed to obtain information from the client, staff, and societal value perspectives. Although the lack of an experimental evaluation design limited the ability to generalize the results, they indicated that the Cornerstone therapeutic community did successfully impact the lives of the chemically dependent, recidivist offenders in that program.

A study of chemically dependent (alcohol abuse), recidivist offenders in Washington State was reported in the 1978 document Alcohol Use and Adult Recidivism in Washington State. While this study is not directly relevant to the evaluation of treatment, it does provide baseline data for evaluating the relationship between alcohol use and return to incarceration. The major finding of this study was that in the short term (1-2 years) the rate of return to prison is higher for persons who have a history of excessive alcohol use, but as the follow-up period is extended (up to 4 years), the rates of return even out.

No studies of comparison of alcohol use and behavior while incarcerated were found as a result of this literature search. Likewise, the literature review was unable to provide information on the impact of substance abuse treatment on offender behavior during and subsequent to participation in treatment programs. From the point of view of prison management, such information would be vital to any cost-effectiveness consideration for newly developing or ongoing prison based programs.

CHAPTER THREE

METHODOLOGY

Statement of the Problem

Evaluation of the substance abuse treatment program was undertaken to provide information related to the Department's program goal and objectives, listed earlier, as well as to investigate the impact on inmates who participated in the treatment programs. Although previous research has not confirmed substance abuse as a causative agent in criminal activity, it was a hope of the 1983 Legislature that substance abuse treatment would lessen such activity. DOC's hope was that substance abuse treatment would lessen substance use activity during incarceration as well.

Analytic Framework

While the substance abuse treatment program goal and objectives established by the Department of Corrections provide the overall context for the evaluation research described in this report, more specific and measureable evaluation objectives were developed to help focus collection and analysis of relevant data.

The three major objectives which provided the rudimentary frame work for the research design were:

1. To develop a data base to assess the size of the target population;
2. To evaluate the process of the provision of substance abuse treatment services; and
3. To evaluate the outcome of treatment.

The first objective indicated a need for a random sample of the prison population. The third objective required a control group. Both objectives were served by a sample of inmates released prior to initiation of the substance abuse treatment program. There were three advantages to this solution. First, there was no contamination by exposure to the substance abuse treatment programs. Second, offender histories of infractive behavior for the total incarceration period were obtainable. Finally, the comparative base for recidivism analysis was immediately available for tracking.

The sample design called for sufficient cases to assure at least 10 percent representation of the 1,933 releases in the year prior to program start-up, plus as many more as a small research staff could reasonably record. Once the sample was drawn, the source of control group data was case records from the Board of Prison Terms and Paroles (BPTP). This source was also used to augment program participant data obtained from the programs.

Target Population Estimate

The target population for substance abuse treatment was inferred from case reading of the random sample of releasees. Indicators of chemical dependency were gleaned from psychological profiles, presentence investigations, preparole investigations or prior parole violation reports. Data recorders were directed to find a preponderance of evidence rather than to rely on a single documentation. In other words, to be conservative. The percentage of identified substance dependency furnished the best estimate of the size of a target population within one year of release.

Process Expectations

The second evaluation objective indicated that attention be directed to the amounts and appropriateness of the service delivered. While process analysis cannot supply impact data, it should give a sense of what the program is accomplishing, given the resources, organization, and environmental aspects of a particular program. In addition, the process evaluation may help support results of the outcome evaluation that might not otherwise be trusted. The process expectations, based on the RFP and the contract negotiations, were that:

1. The population served would meet the requirements set out in the legislative mandate (persons in need, within one year of release);
2. Services would be offered in a nondiscriminatory fashion;
3. There would not be significant variation in the hours of service provided those completing the program within a given Catchment Area; and
4. At least 20 percent of those entering the program would complete it.

Frequency distributions served as indicators of whether expectations 1 and 4 were met. To assess nondiscrimination, expectation 2, there was a comparison between the race, sex and age distribution in the control group and the race, sex and age distribution in the programs. Analysis of expectation 3 was more complex and required higher levels of statistical testing. The issue of treatment equivalency for those completing the program was examined by comparisons of mean average treatment hours within each Catchment Area as well as between Catchment Areas. The latter measurement was particularly relevant to the evaluation outcome.

Outcome Hypotheses

Outcome evaluation hypotheses were shaped by two separate factors. The first was the implicit reason for funding, that provision of services would make a difference. The second was the need to evaluate the DOC program objective, "to assure program effectiveness."

All testable hypotheses take the form of: "There is no difference between..." These are referred to as null hypotheses and are the statements that were statistically evaluated. For brevity only the alternative hypotheses are presented here.

The first hypothesis: After completion of substance abuse treatment, offenders will show a difference in the frequency of substance-use infractions.

This hypothesis was based on the assumption that a successful program would educate the offender to the hazards of continued substance use and inhibit the behavior. The total number of substance-use infractions was compared between the control group and the program participants. To refine the measure, the number of pre-treatment and post-treatment infractions were divided by the corresponding months of time in prison to establish rates of infractions. Paired comparisons, an individual's rate of infractions prior to treatment minus the rate of infractions post treatment, were expected to accurately measure change among the program participants.

The second hypothesis: After completion of substance abuse treatment, offenders will show a difference in the frequency of major infractions.

The expectation that training in anger management and communication skills would effect a change of confrontational behavior is inherent in this hypothesis. The same methodology as proposed for the prior hypothesis was appropriate here as well.

The third hypothesis: Offenders who complete substance abuse treatment will not return to prison for substance-use related crimes or parole violations at the same rate as those without treatment.

This hypothesis relates to the possible impact of substance abuse treatment on recidivism. It does not suggest that recidivism will be changed overall for program participants. Intrinsic to that suggestion would be an assumption that substance abuse is causative of a crime, a research question that carries far beyond the boundaries of a program evaluation effort. Instead, it is posited here that substance use in relationship to reasons for recidivism will not be the same for those completing the program as for those, including the control group, who do not. The methodology proposed for this analysis involved comparison with the control group rates of recidivism as well as rates of recidivism for those not completing the program. Both groups will be monitored for 18 months following release; the reasons for return to prison, parole violation or new crime, and whether substance use was involved will be recorded from BPTP files.

None of the three outcome hypotheses were based on known theory. They were exploratory only. However, since so little had been done to evaluate substance abuse treatment programs in prison settings, a rational approach suggested that they were viable hypotheses under the given conditions.

The Research Instruments

The primary research instrument (Attachment A) was designed for recording all data for both the control group and program participants. For the control group, the instrument was completed by research unit staff. Various demographic variables, identified from the literature review as relevant to infractive and recidivist behaviors or necessary for process evaluation, were collected, as were data regarding substance use involvement in the most recent offense. The prison history portion of the

instrument was designed to record the reason for the current incarceration, the numbers and types of infractions during that term, and the number of previous incarcerations, including those in other state and federal institutions.

The first page of the instrument also served as an admission form for program participants. This form and a screening and referral form (Attachment B), which summarizes diagnostic impressions, were forwarded to the research unit. Research unit staff recorded the level of substance dependency from the screening and referral form. In addition, they compiled the total program hours and entered the date and type of program termination data obtained from a monthly log of activities forwarded through the Correctional Program Supervisor.

Validity and Reliability

Validity of the research questionnaire was established by pretesting of the questions to eliminate ambiguity. For data gathered by research staff there was direct supervision to ensure common definitions of terms and consistency. Treatment staff completing page one of the questionnaire were furnished with written definitions and instructions for each variable. In addition, research data compilers identified oversights and contacted the treatment staff for corrected data as quickly after the receipt of the questionnaires as possible.

Reliability checks of data from case reading were accomplished on a random basis with more than a 20 percent re-read rate. Reliability was somewhat harder to establish for the data obtained from the treatment staff. Resources for some of the data were not as readily available to treatment staff as had been supposed. And, in the beginning stages of the project, they were not readily available to the research staff either. With the advent of a new offender based information system, dates, such as date of admission, birth, etc., furnished by the treatment staff were rechecked by research staff.

Motivation for providing research related data was hard to inspire except among the DOC Correctional Unit Supervisors and the treatment staff supervisors. Direct training for treatment staff was limited to less than one hour during an initial orientation meeting and supplemented only on a quarterly basis thereafter. Training, except for written directions, did not extend to all treatment staff some of whom

were part-time and did not attend the quarterly meetings. As a result, many of the socioeconomic indicators associated with treatment outcomes in previous studies were not coded and had to be dropped from the analysis.

Even when a discarded item seemed at an acceptable level statewide, it was found that missing data was concentrated to a significant degree in one or two treatment centers, thus biasing possible findings. The result was that many variables were discarded from the analysis. Discarded variables include: employment, income, prior inpatient substance abuse treatment, AA/NA affiliations, and information relating to the crime of commitment (items 16 through 21 on Attachment A).

The Control Group

As previously stated, the goal was to select a sample of at least 10 percent of the offenders who had been released from prison in the year prior to the inception of the program.

Selecting a representative sample from any population is difficult; from an offender population, it may be impossible. Changes in legislation frequently impact the composition and characteristics of this group. Such was the case at the time the present study began. With intent to relieve prison overcrowding, two early release bills, HB922 signed in 1979, and HB888 passed in March 1983, authorized the Board of Prison Terms and Paroles to release offenders at dates up to six months earlier than originally scheduled. The legislation of 1983 clearly defined the parameters within which early release might occur. Consideration was mandated for those convicted of nonviolent felonies, as defined by RCW 9.95.040, who had the best records of conduct during confinement.

In regard to sampling, the dilemma was twofold:

1. The release population was diluted by the unusually high proportion of those with less serious offenses; and
2. The remaining prison population, which included many of those who would be eligible for program participation, would have a higher concentration of offenders sentenced for violent crimes and/or more infractive behavior.

Due to a lag of information from BPTP and a disabled computer system at DOC, it was not possible to consider stratified or cluster sampling techniques. The tools at hand were frequencies of releases by month and a listing of released inmates by release date, identification number, and name.

A comparison of release frequencies for prior years evidenced the impact of early release. Immediately following the passage of HB888, releases rose to approximately 50 percent higher than the normal rate. After exceptionally high releases in April and May, the following months were erratic, but showed a tendency to level off. Table A recaps the releases targeted for sampling and includes the numbers of early releases identified after the sample was drawn.

TABLE A
MONTHLY TOTAL RELEASES AND EARLY RELEASES
PRIOR TO APRIL 1984

MONTH/YEAR	TOTAL RELEASES	EARLY RELEASES	PERCENT
			EARLY RELEASES/ TOTAL RELEASES
April 1983	250	130	52%
May 1983	240	127	53%
June 1983	134	51	38%
July 1983	153	65	42%
August 1983	155	50	32%
September 1983	152	56	37%
October 1983	126	30	24%
November 1983	144	49	34%
December 1983	139	36	26%
January 1984	143	36	25%
February 1984	131	32	24%
March 1984	166	37	22%
TOTAL	1,933	699	36%

Based on release trends, it was assumed that the four month period just prior to the start up of the substance abuse treatment programs would be least likely to be biased by the effects of early release and thus would adequately represent the actual prison population.

Names were selected serially from a list arranged by release date. A random starting point was used on each of two passes through the data. The original sample size was 273. Of these, some were found to have been inaccurately identified as parolees or persons whose sentences had expired. These cases were replaced. Case records could not be found for a few of the original sample. In all, data was collected for 265 cases; approximately 14 percent of the year's total releases and 36 percent of those released in the four month sample period. Seventy cases were later identified as having been released by virtue of HB888. Excluding these 70 early release cases reduced our sample to 10 percent of the annual releases and 27 percent of the four month sample period.

Statistical Analysis

All nominal and ordinal data were analyzed using the chi square for tests of association and independence. Examples of data falling in this category are race, sex, type of offense, and level of substance dependency. Student's t test for equal means was used for paired comparison of pre/post treatment infraction rates. A variation of the Student's t test, Tukey's HSD (Highly Significant Difference), was used when multiple means were compared. The mean services hours provided in the seven treatment centers is an example of such a comparison. Student's t test might have increased the probability of rejecting a null hypothesis that was in fact true. Tukey's HSD corrected for this possibility and was therefore a more conservative test.

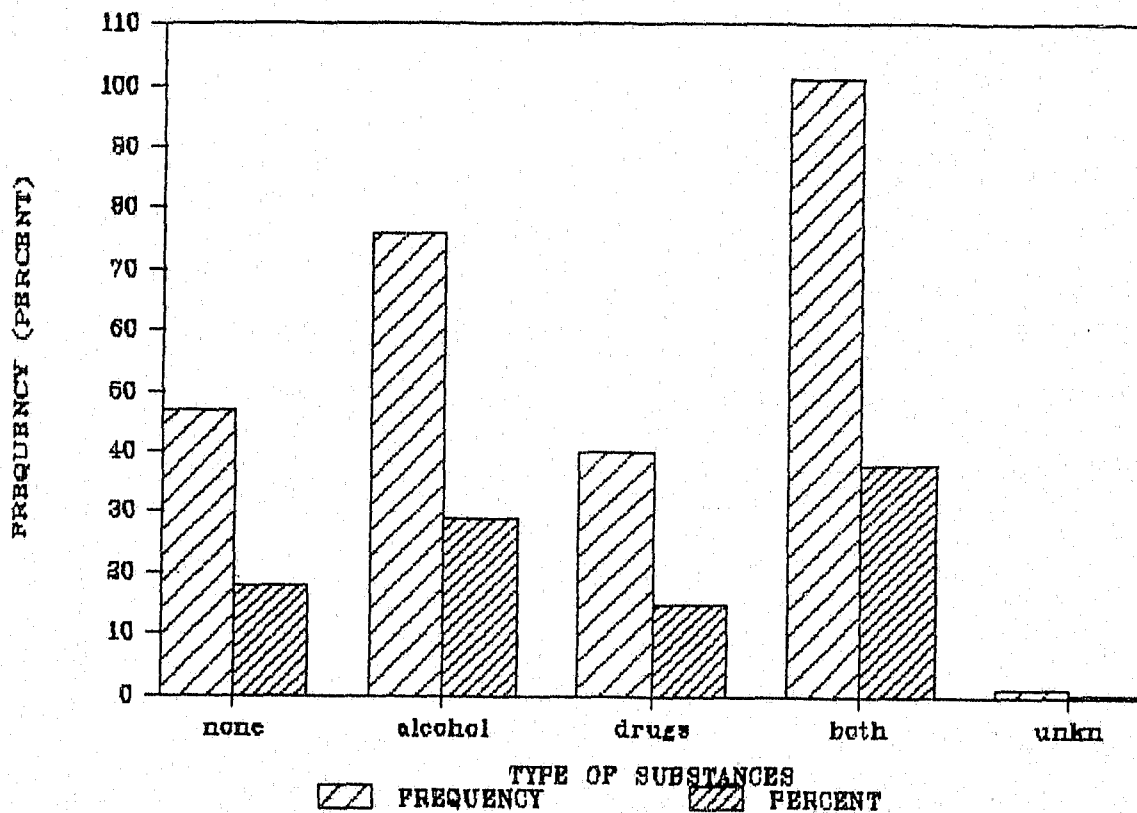
For this evaluation a null hypothesis will be rejected only if the statistical differences are such that they would be expected to occur in only 5 samples out of 100 (.05), implying that the findings will be accurate in 95 percent of the cases. All computer analyses utilized the Statistical Analysis System (SAS) programs. If a null hypothesis is rejected, i.e., a significant difference is found between two conditions, the alternative hypothesis may be accepted. The discussion following will present the alternative hypotheses.

CHAPTER FOUR

THE CONTROL GROUP

The control group drawn for this evaluation study consists of individuals who were not exposed to the prison-based treatment program. Analysis of this group's substance use indicates a substantial target population for substance abuse information and treatment services in the prison system. Despite conservative coding by the data collectors, evidence of substance abuse problems were found in over 80 percent of the 265 cases read. Figure 1 summarizes substance abuse problems identified in the control group, without detail on the severity of the problem.

FIGURE 1
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
TYPES OF SUBSTANCES ABUSED



Of the 265 individuals in the control group, 6 percent were female and 94 percent male. Their average age at admission was 27 years. Table 1 shows the relationship between age and substance abuse problems.

TABLE 1
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
AGE GROUP BY SUBSTANCE ABUSED

AGE GROUP	SUBSTANCE ABUSED				TOTAL
	NONE	ALCOHOL	DRUGS	BOTH	
20 & Under	9	13	9	29	60
21-24	14	17	15	33	79
25-29	7	14	7	22	50
30-39	7	22	8	14	51
40 & Over	10	10	1	3	24
TOTAL	47	76	40	101	264*
MEAN AGE	29.8 yr.	29.7 yr.	25.9 yr.	24.7 yr.	

Chi Square = 27.103; Significant at Prob = .0075

*Unknown = 1

The substance abused and age at admission show a significant correlation when using chi square. Applying the Tukey's HSD test identified more precisely where the differences existed. Poly abusers, those using drugs and alcohol, were younger on the average than were alcohol only abusers and non-abusers. Beyond that, there appeared to be no clear relationship between type of substance abused and age.

The relationship between race and substance abuse was difficult to assess. The numbers of Native American and Other (Asian, Hispanic, etc.) were too small for a reliable chi square statistic. Most of the sample were polyabusers - used both drugs and alcohol. Polyabuse was evenly distributed through the population. Blacks (18 percent of the sample) represented 42 percent of the drug users. Whites, on the other hand, (73 percent of the sample) represented 84 percent of the alcohol abusers. They were also slightly overrepresented among the non-abusers as were the Others. There were no Native Americans among the non-abusers.

TABLE 2
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
RACE BY SUBSTANCE ABUSED

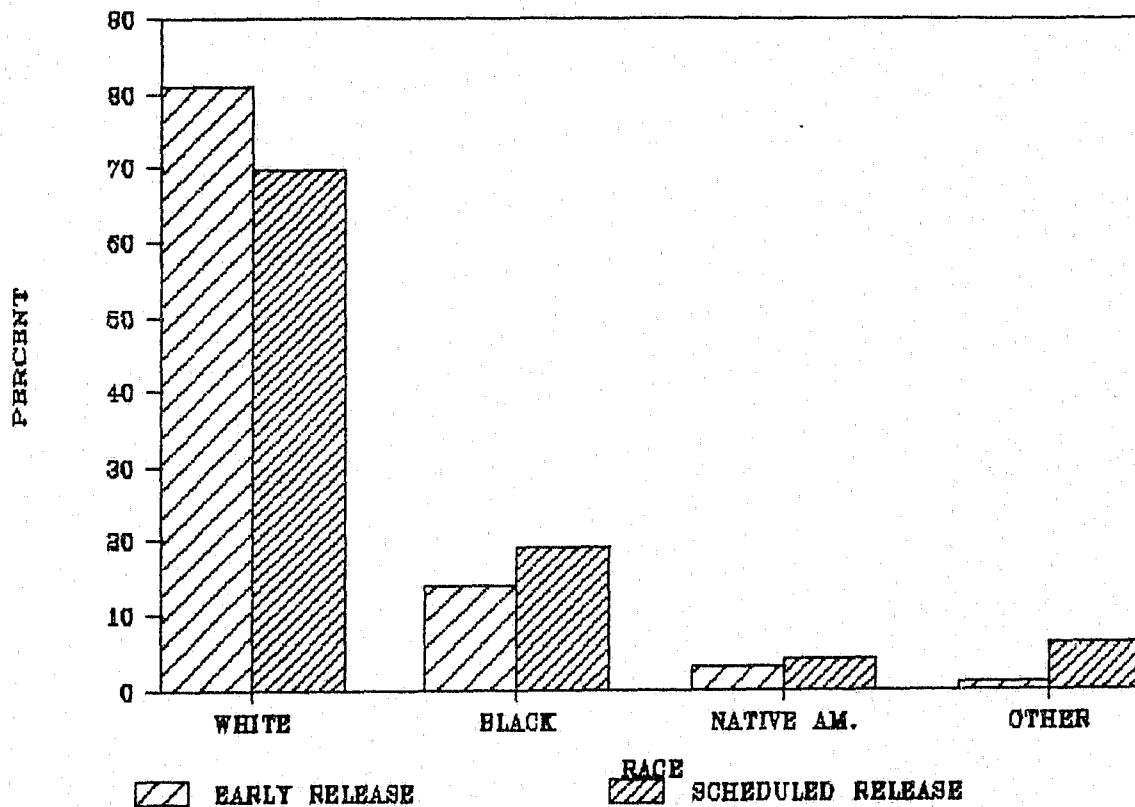
RACE	SUBSTANCE ABUSED				TOTAL	PERCENT OF SAMPLE
	NONE	ALCOHOL	DRUGS	BOTH		
White	36 77%	64 84%	21 53%	72 71%	193*	73%
Black	7 15%	5 7%	17 42%	19 19%	48	18%
Native American	0 0%	4 5%	1 3%	5 5%	10	4%
Other	4 9%	3 4%	1 3%	5 5%	13	5%
TOTAL	47 18%	76 29%	40 15%	101 38%	264	100%

* Unknown = 1

As seen in Figure 2, there was no significant difference in the racial distribution between the early releases and the regularly scheduled releases in the control group, although the same warning about too few observations applies.

FIGURE 2

SUBSTANCE ABUSE PROGRAM CONTROL GROUP
RACE BY EARLY RELEASE AND SCHEDULED RELEASE



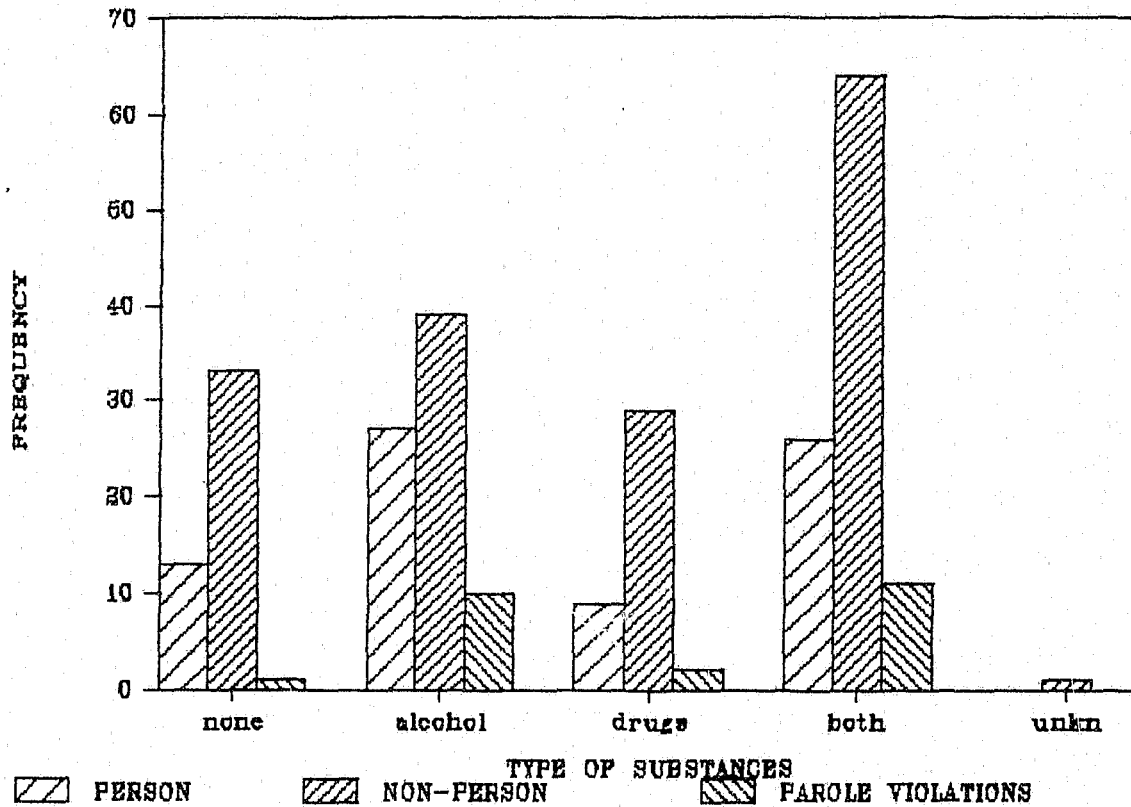
The offenses for which the control group had been incarcerated are displayed in Table 3. Person crimes, excluding sex crimes, ran the gamut from murder to assault, arson, and robbery. Sex crimes have been kept as a separate category and include rape as well as indecent liberties, solicitation, etc. The category of property crimes consisted of theft, burglary, possession of stolen property, and arson in which persons were not directly endangered. The drug category combines both selling and possessing. Examples of the "other" category might be escape, willful failure to return to work release, eluding an officer, or carrying a concealed weapon. Persons who are committed for technical parole violations make up a distinct category. Approximately 54 percent of the control group's current commitment had been for a property crime conviction.

TABLE 3
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
OFFENSE TYPE

OFFENSE TYPE	FREQUENCY	PERCENT
Person Crimes (excluding sex crimes)	61	23%
Sex Crimes	14	5%
Property Crimes	143	54%
Drug Crimes	12	5%
Other Crimes	11	4%
Parole Violations	24	9%
TOTAL	265	100%

To examine the relationships between offense type and substance abuse, the offense data was collapsed into three categories: person crimes (including sex crimes), non-person crimes (property, drug, and other crimes), and parole violations. Person crimes and non-person crimes are often considered equivalent to violent crimes and non-violent crimes. Figure 3 summarizes the data. The chi square test, omitting parole violations, indicated no relationship between type of substance abused and type of crime committed. When parole violations were included in the analysis, the results were much the same.

FIGURE 3
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
SUBSTANCE ABUSED BY OFFENSE TYPE
(INCLUDING PAROLE VIOLATIONS)



Offense differences between the early release and regularly scheduled release components of the control group indicated that BPTP had apparently closely followed the legislative directive in regard to releasing those convicted of non-violent crimes. Table 4 summarizes the types of offense by the type of release. Only one of the early releases had been convicted of a person crime, and substantially fewer of the early release component had been incarcerated as the result of parole violations.

The parole violation category was omitted to produce a 2 x 2 factorial table for the chi square test (Table 5). As would be expected from the legislative mandates for early release, there was a significant difference between the early release and the scheduled release crime types. However, as the foregoing analysis showed, there is no relationship between crime type and substance abuse. Therefore, the control group is an adequate sample for comparison with the program participants.

TABLE 4
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
OFFENSE TYPE BY TYPE OF RELEASE

OFFENSE TYPE	EARLY RELEASE	SCHEDULED RELEASE	TOTAL RELEASE
Person Crimes (excluding sex crimes)	1	60	61
Sex Crimes	0	14	14
Property Crimes	59	84	143
Drug Crimes	5	7	12
Other Crimes	1	10	11
Parole Violations	4	20	24
TOTAL	70	195	265

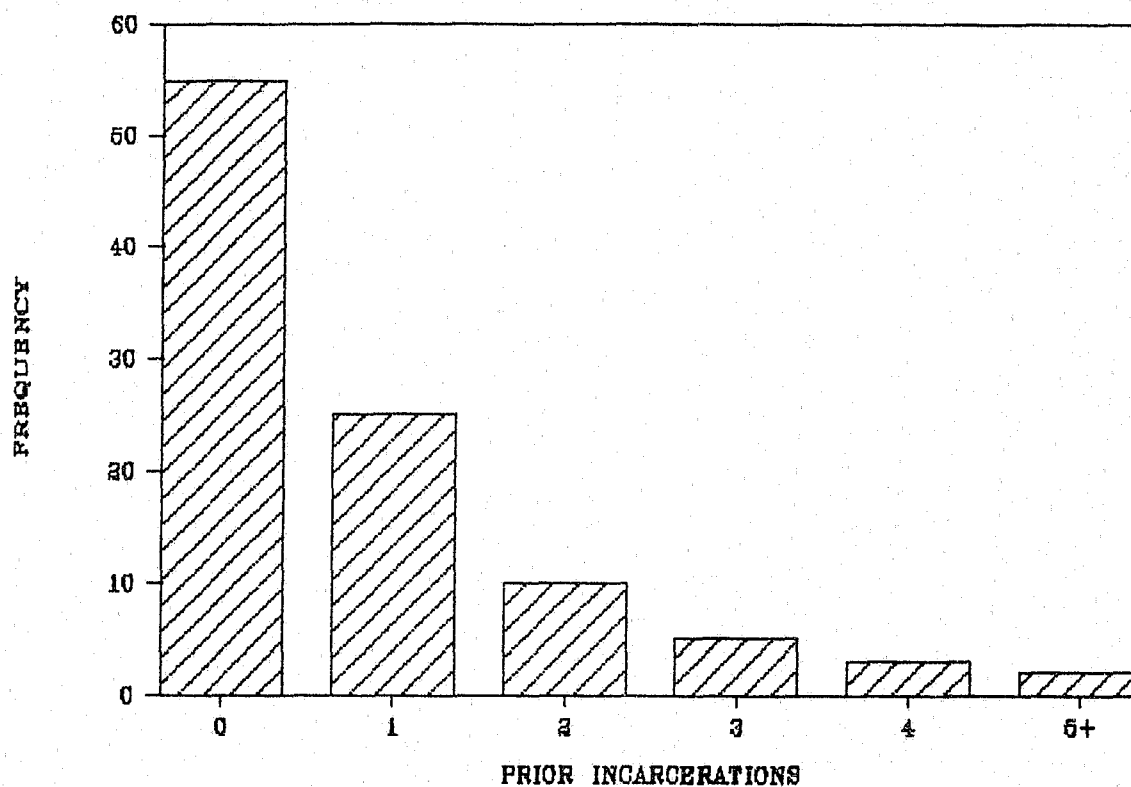
TABLE 5
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
OFFENSE TYPE BY TYPE OF RELEASE
(EXCLUDING PAROLE VIOLATIONS)

OFFENSE TYPE	EARLY RELEASE	SCHEDULED RELEASE	TOTAL RELEASE
Person Crimes	1	74	75
Non-Person Crimes	65	101	166
TOTAL	66	175	241

Chi Square = 37.16; Significant at Prob = .0001

Criminal behavior is not only described by the type of crime committed but by criminal history as well. Figure 4 indicates the frequency of prior incarcerations among the group as an index of prior criminal activity.

FIGURE 4
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
PRIOR INCARCERATIONS



A comparison of means test did not indicate a difference in prior incarcerations between the abusers and the non-abusers (Table 6), nor did Tukey's HSD distinguish differences in the average number of priors by the type of substance abused.

TABLE 6
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
MEAN PRIOR INCARCERATIONS BY NON-ABUSERS
AND SUBSTANCE ABUSERS

ABUSE TYPE	PRIORS		STANDARD DEVIATION
	MEAN	RANGE	
Non-Abusers (n=47)	.8936	0-7	1.6048
Abusers (n=216)	.8333	0-8	1.2464
Prob t = .8095; N.S.			

Prior commitments for the early release and scheduled release components of the control group failed to show a significant difference between the two, further supporting the utility of the control group (Table 7).

TABLE 7
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
PRIOR INCARCERATIONS BY TYPE OF RELEASE

PRIOR INCARCERATIONS	EARLY RELEASE*	SCHEDULED RELEASE**	TOTAL
0	41	106	147
1	19	46	65
2	5	21	26
3	3	9	12
4	1	7	8
5+	1	5	6
TOTAL	70	194	264

* Early Release Mean = .67; Standard Deviation = 1.05

** Scheduled Release Mean = .90; Standard Deviation = 1.39

Prob t > .2083; N.S.

Infractions as a function of substance abuse showed some interesting relationships. While over 64 percent of the offenders did not have substance-use infractions, only 44 percent had no other major infractions. A simple calculation of the number of inmates having received a given number of infractions times that number of infractions produces the total number of infractions. It becomes apparent that a relatively small number of inmates are responsible for a very large percent of the infractions (Table 8).

TABLE 8
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
TOTAL INFRACTIONS COMMITTED BY TYPE OF INFRACTION

Number of Infractions per Inmate	SUBSTANCE USE		OTHER MAJOR		TOTAL	
	Number of Inmates	Number of Infractions	Number of Inmates	Number of Infractions	Number of Inmates	Number of Infractions
0	170	0	116	0	88	0
1	46	46	50	50	52	52
2	19	38	29	58	31	62
3	13	39	20	60	20	60
4	9	36	12	48	17	68
5	3	15	5	25	10	50
6	3	18	3	18	6	36
> 6	0	0	27	> 162	38	> 228
Total	263	192	262	> 421	262	> 556

Tables 9 and 10 summarize the data as average numbers of total infractions and substance-use infractions in that order. A comparison of means test did not distinguish between abusers and non-abusers for total infractions, however abusers did have significantly more substance-use infractions.

TABLE 9
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
ABUSE PATTERNS AND TOTAL INFRACTIONS

ABUSE TYPE	TOTAL INFRACTIONS		STANDARD DEVIATION
	MEAN	RANGE	
Non-Abusers (n = 46)	3.4130	0-35	7.73
Abusers (n = 215)	3.1162	0-29	4.63
Prob $t > .8028$ N.S.			

TABLE 10
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
ABUSE PATTERNS AND SUBSTANCE-USE INFRACTIONS

ABUSE TYPE	SUBSTANCE-USE INFRACTIONS		STANDARD DEVIATION
	MEAN	RANGE	
Non-Abusers (n = 47)	.3191	0-2	.5937
Abusers (n = 215)	.8232	0-6	1.3659
Significant at Prob $t > .0001$			

The means and standard deviations of substance-use infractions, Table 11, were analyzed using Tukey's HSD for differences between the means. Those whose patterns of abuse were drug related had significantly more substance-use infractions than did those with no abuse or alcohol abuse patterns. They did not have significantly more than those who abused both substances. There were no significant differences between alcohol abusers and non-abusers.

TABLE 11
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
SUBSTANCE ABUSED AND SUBSTANCE-USE INFRACTIONS

SUBSTANCE ABUSED		SUBSTANCE-USE INFRACTIONS	
		MEAN	STANDARD DEVIATION
None	(n = 47)	.3191	.5937
Alcohol	(n = 76)	.5395	1.0255
Drugs	(n = 40)	1.1750	1.7229
Both	(n = 99)	.8989	1.4033

The question arose as to what effect age might have on infractive behavior. Substance-use infractions and total infractions were grouped into five categories: zero, one, two, three, four, and more than four infractions. No age differences were noted for the variable of substance-use infractions, but looking at total infractions disclosed that those in the zero category were significantly older than the others.

Drug abusers do commit significantly more substance-use infractions. Nevertheless, it must be concluded that abuse per se is not a factor in the total number of infractions committed.

Prison adjustment, as evidenced by infractive behavior was another consideration for BPTP when granting early release. Table 12 shows that when considering total infractions, the early release group did average a significantly lower number of infractions. However, there was no difference between the groups in the average number of substance-use infractions (Table 13). Nonetheless, caution will need to be exercised when comparing program participant and control group infractions.

TABLE 12
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
TYPE OF RELEASE AND TOTAL INFRACTIONS

TYPE OF RELEASE	NUMBER OF TOTAL INFRACTIONS									TOTAL RELEASES
	0	1	2	3	4	5	6	>6	UNKNOWN	
Early Release *	28	17	6	4	6	3	1	4	1	70
Scheduled Release **	60	35	25	16	11	7	5	34	2	195
TOTAL	88	52	31	20	17	10	6	38	3	265

* Early Release Mean = 2.03; Standard Deviation = 3.69

** Scheduled Release Mean = 3.56; Standard Deviation = 5.69
Significant at Prob $t > .0121$

TABLE 13
SUBSTANCE ABUSE PROGRAM CONTROL GROUP
TYPE OF RELEASE AND SUBSTANCE-USE INFRACTIONS

TYPE OF RELEASE	NUMBER OF SUBSTANCE USE INFRACTIONS									TOTAL RELEASES
	0	1	2	3	4	5	6	>6	UNKNOWN	
Early Release *	50	12	2	4	0	1	1	0	0	70
Scheduled Release **	120	34	17	9	9	2	2	0	2	195
TOTAL	170	46	19	13	9	3	3	0	2	265

* Early Release Mean = .56; Standard Deviation = 1.18

** Scheduled Release Mean = .79; Standard Deviation = 1.31
Prob $t > .1859$, N.S.

Summary Discussion

A random sample of parolees - released just prior to the initiation of substance abuse treatment programs - was selected for two reasons:

- o to calculate the size of the "in need of treatment" population, and
- o to serve as a comparison group (control group) against which the treatment program could be evaluated.

Data was gathered from case records at the Board of Prison Terms and Paroles. From this we determined that 80 percent of the sample evidenced substance abuse problems. Since approximately 2,500 are released from the state prison system annually, it is expected that some 2,000 inmates per year constitute the treatment target population.

Due to a legislative mandate for Early Release (HB 888, 1983) the potential for a nonrepresentative control group existed. Indeed, the Early Releasees were different from those releasing at their normally prescribed dates. As specified by legislative instruction, they were nonviolent property offenders who had significantly fewer infractions while in prison. They were not different from the regularly scheduled releasees in terms of race, age, or sex. And, they were not different in the proportion of substance abusers. Therefore, the control group was deemed comparable to the treatment participants in most instances. Infraction rate analysis will control for Early Release.

This random sample was also valuable for exploring relationships - or lack thereof - between prison behavior, criminal behavior and substance abuse.

No relationship was found between substance abuse and type of crime committed. Non-abusers, alcohol abusers and drug abusers committed person or property crimes at the same rate.

Substance abusers had more substance- use infractions while in prison. Surprisingly, however, they did not have more total infractions than non-abusers.

Criminal history, as measured by the number of prior incarcerations, was not correlated with substance abuse. This would tend to support the contention that, in the long run, recidivism will be the same for abusers as for non-abusers, although abusers may return more quickly. Given this evidence, an expectation that a successful treatment program will delay recidivism, but not reduce it, seems logical.

CHAPTER FIVE

PROCESS EVALUATION

Program processes seem always intertwined in ways that preclude the possibility of evaluating one process without touching on aspects of another. This will be reflected in the following analysis. The analysis will begin with the selection process: how many admissions and the appropriateness of those admissions. It will continue through the service process: how much treatment was provided participants and in what degree of intensity. Finally, it will investigate how many completed the program.

The Selection Process

Evaluation of the selection process relates to the previously stated program expectations that:

- o the population served would meet the requirements set out in the legislative mandate (persons in need, within one year of release), and
- o services would be offered in a nondiscriminatory fashion.

In the period between March 1984 and March 1985, thirteen months, a total of 774 offenders were admitted to substance abuse treatment programs. Twentysix of these entered a program and dropped, then entered the same program a second time and completed. The data base was corrected to combine the hours of treatment for both admissions and delete the original drop. This correction served two purposes: it prevented double counting within the Catchments, and it provided a more realistic measure of the hours provided to program participants who completed.

Table 14 summarizes the statewide admissions to, and releases from, the treatment programs and indicates the monthly in-service population. The term "drop," as used throughout this analysis includes: those who did not attend after acceptance into the program, those who were terminated by staff due to over enrollment or inappropriate behavior, those who were transferred either to other institutions or segregation, and those released from prison prior to completion. Fluctuations in the monthly population are better delineated on Tables 15 through 19 which summarize admissions by Catchment Area. Although the presentation of data by monthly increments somewhat blurs distinctions that might have been made if weekly increments had been presented, it is still possible to discern from the patterns of Catchment admissions how closely the contractors met their intended length of program.

Catchment II, PCCW and MICC, represent overlapping programs conducted by separate counselors, one at each treatment center. The monthly in-service population is consistently higher than for other Catchments, and the continuity of intakes and releases follows STOWW's stated plan for providing services on a flow basis. Interestingly, while the other Catchments' admission rates were directly related to the space available for group activities, Catchment II admissions did not reflect their limited space.

Catchment III also encompassed two treatment centers, IRCC and WSR Honor Farm. Although one program cycle was completed within WSR, treatment was discontinued at that site in favor of concentrating on the Honor Farm. The one WSR program has been included with the Honor Farm for analysis. The treatment team in Catchment III alternated sessions between the two primary treatment centers.

TABLE 14
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
STATEWIDE PROGRAM MOVEMENT

	BEGINNING POPULATION	INTAKE	DROP	COMPLETE	ENDING POPULATION
March 1984	0	73	2	0	71
April 1984	71	96	18	1	148
May 1984	148	63	35	27	149
June 1984	149	27	18	62	96
July 1984	96	118	16	45	153
August 1984	153	13	14	52	100
September 1984	100	98	17	59	122
October 1984	122	69	24	66	101
November 1984	101	72	11	22	140
December 1984	140	6	7	93	46
January 1985	46	100	12	10	124
February 1985	124	8	14	14	104
March 1985	104	31	9	81	45
April 1985	45	N/A*	7	33	5
May 1985	5	N/A	0	5	0

*The Substance Abuse Treatment Program Evaluation ended the monitoring of admissions in March 1985.

TABLE 15
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
CATCHMENT I: CCCC
PROGRAM MOVEMENT

	BEGINNING POPULATION INTAKE		DROP COMPLETE		ENDING POPULATION
March 1984	0	0	0	0	0
April 1984	0	20	8	0	12
May 1984	12	28	0	12	28
June 1984	28	3	2	0	29
July 1984	29	29	0	29	29
August 1984	29	2	0	0	31
September 1984	31	26	4	28	25
October 1984	25	0	4	21	0
November 1984	0	29	0	0	29
December 1984	29	0	2	25	2
January 1985	2	21	4	0	19
February 1985	19	0	2	1	16
March 1985	16	0	0	16	0
April 1985		N/A			
May 1985		N/A			

TABLE 16
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
CATCHMENT II: PCCW AND MICC
PROGRAM MOVEMENT

	BEGINNING POPULATION INTAKE		DROP COMPLETE		ENDING POPULATION
March 1984	0	56	1	0	55
April 1984	55	21	8	1	67
May 1984	67	12	15	6	58
June 1984	58	16	12	17	45
July 1984	45	24	6	14	49
August 1984	49	11	5	30	25
September 1984	25	35	4	2	54
October 1984	54	17	7	27	37
November 1984	37	25	2	11	49
December 1984	49	6	4	12	39
January 1985	39	13	3	10	39
February 1985	39	5	4	13	27
March 1985	27	9	2	16	18
April 1985	18	N/A	1	17	0
May 1985		N/A			

TABLE 17
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
CATCHMENT III: WSR AND IRCC
PROGRAM MOVEMENT

	BEGINNING POPULATION INTAKE		DROP COMPLETE		ENDING POPULATION
March 1984	0	15	1	0	14
April 1984	14	7	0	0	21
May 1984	21	16	7	9	21
June 1984	21	1	0	16	6
July 1984	6	22	3	0	25
August 1984	25	0	3	16	6
September 1984	6	21	1	0	26
October 1984	26	2	4	18	6
November 1984	6	16	3	0	19
December 1984	19	0	1	13	5
January 1985	5	17	0	0	22
February 1985	22	0	0	0	22
March 1985	22	16	2	17	19
April 1985	19	N/A	5	9	5
May 1985	5	N/A	0	5	0

TABLE 18
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
CATCHMENT IV: WSP
PROGRAM MOVEMENT

	BEGINNING POPULATION INTAKE		DROP COMPLETE		ENDING POPULATION
March 1984	0	2	0	0	2
April 1984	2	34	2	0	32
May 1984	32	5	11	0	26
June 1984	26	4	2	22	8
July 1984	8	34	2	0	40
August 1984	40	0	3	0	37
September 1984	37	3	8	29	3
October 1984	3	50	6	0	47
November 1984	47	2	5	1	43
December 1984	43	0	0	43	0
January 1985	0	49	5	0	44
February 1985	44	0	8	0	36
March 1985	36	0	4	32	0
April 1985	0	N/A			
May 1985	0	N/A			

TABLE 19
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
CATCHMENT IVA: PLCC
PROGRAM MOVEMENT

	BEGINNING POPULATION	INTAKE	DROP	COMPLETE	ENDING POPULATION
March 1984	0	0	0	0	0
April 1984	0	14	0	0	14
May 1984	14	2	2	0	14
June 1984	14	3	2	7	8
July 1984	8	9	5	2	10
August 1984	10	0	3	6	1
September 1984	1	13	0	0	14
October 1984	14	0	3	0	11
November 1984	11	0	1	10	0
December 1984	0	0	0	0	0
January 1985	0	0	0	0	0
February 1985	0	3	0	0	3
March 1985	3	6	1	0	8
April 1985	8	N/A	1	7	0
May 1985		N/A			

The program provided through subcontract at PLCC is presented separately as Catchment IVA. This treatment center, like PCCW and MICC, was serviced by one counselor rather than a team. The admissions and completions do not give a clear picture of program activities in this Catchment. As shown on Table 20, 12 of the 18 drops that occurred at PLCC were due to transfers out of the institution.

Not captured by the research design, but known by research staff, was that many of those completing the program at PLCC had also transferred. The counselor continued servicing this population at Geiger Work/Training Release, requiring duplication of classes and travel time and resulting in unequal program periods. The counseling position was vacant from January 1985 through part of February 1985. The resultant low service population may distort some statistical measures of treatment center comparisons.

TABLE 20
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
REASONS FOR NON-COMPLETION
BY TREATMENT CENTER

TREATMENT CENTER	REASON							
	NO SHOW AND STAFF TERMINATION	RELEASE FROM PRISON	TRANSFER TO SEGREGATION	TRANSFER TO OTHER FACILITIES				
CCCC* (n=158)	13 (8%)	3 (2%)	2 (1%)	8 (5%)				
PCCW* (n=107)	9 (8%)	5 (5%)	2 (2%)	7 (7%)				
MICC* (n=143)	30 (21%)	5 (3%)	3 (2%)	12 (8%)				
WSR* (n= 72)	14 (19%)	0	0	6 (8%)				
IRCC* (n= 61)	7 (11%)	2 (3%)	0	1 (2%)				
WSP* (n=183)	28 (15%)	11 (6%)	4 (2%)	13 (7%)				
PLCC* (n= 50)	6 (12%)	0	0	12 (24%)				
STATEWIDE** (n=774)	107 (14%)	26 (3%)	11 (1%)	59 (8%)				

*Percentage of treatment center admissions.

Turning to the appropriateness of selection, attention focused first on how well the criterion "within one year of release" was met. At the outset it should be noted that 30 of the 426 who had released within one year had actually escaped. This will be discussed further in an outcome evaluation. The data presented here exclude these "self releases." For those who had not released at the time analysis began, post treatment time was calculated as of September 30, 1985. The longest possible time that had accrued since admission to the program was 18 months. As Table 21 shows, of the total treatment population just less than 80 percent had either released prior to one year from program admission or were within 12 months beyond admission to the program. Another 15 percent were one to three months past the guideline period.

Looking only at those who released, 91 percent were found to have done so within a year. This, however, included 22 individuals who were terminated from the program because of release, none due to HB888, which was surely as serious an error in admission as those who exceeded the guidelines. Adjusting for these 22 releases, 86.3 percent fell within the prescribed period.

TABLE 21
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
TIME IN PRISON AFTER PROGRAM ADMISSION* AS OF 9/30/85

PROGRAM CATCHMENT	MONTHS SINCE PROGRAM ADMISSION			Total
	12 or less	13-15	16-18	
I Total	119	20	5	144
(%)	(83)	(14)	(3)	(100)
Releases	90	6	0	96
(%)	(94)	(6)	(0)	(100)
II Total	175	45	20	240
(%)	(73)	(19)	(8)	(100)
Releases	130	15	4	149
(%)	(87)	(10)	(3)	(100)
III Total	106	22	2	130
(%)	(82)	(17)	(2)	(100)
Releases	79	10	0	89
(%)	(89)	(11)	(0)	(100)
IV Total	151	17	11	179
(%)	(84)	(10)	(6)	(100)
Releases	91	5	0	96
(%)	(95)	(5)	(0)	(100)
IVA Total	36	9	0	45
(%)	(80)	(20)	(0)	(100)
Releases	30	1	0	31
(%)	(97)	(3)	(0)	(100)
State Total	587	113	38	738
(%)	(80)	(15)	(5)	(100)
State Releases	420	37	4	461
(%)	(91)	(8)	(.9)	(100)

*Excluding escapees

Among the 277 remaining in prison on September 30, 1985, 39 percent had been in prison longer than one year beyond their admission to the program. Catchment IV, along with Catchment II, had more than 10 percent remaining 16 to 18 months post program admission, however Catchment IV had a higher percentage still within the guidelines (Table 22).

TABLE 22
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
TIME IN PRISON AFTER PROGRAM ADMISSION
NOT RELEASED AS OF SEPTEMBER 30, 1985

PROGRAM		MONTHS SINCE PROGRAM ADMISSION			
CATCHMENT		12 or less	13-15	16-18	TOTAL
I		29	14	5	48
(%)		(60)	(29)	(10)	(100)
II		45	30	16	91
(%)		(49)	(33)	(18)	(100)
III		27	12	2	41
(%)		(66)	(30)	(5)	(100)
IV		60	12	11	83
(%)		(72)	(14)	(13)	(100)
IVA		6	8	0	14
(%)		(43)	(57)	(0)	(100)
TOTAL		167	76	34	277
(%)		(60)	(27)	(12)	(100)

The data suggest that in the final analysis the selection process (for the first year of operation) may fall quite short of the release criterion. However, in defense of those responsible for selection, it should be noted that the sources of information available at the time the programs were initiated were index cards and hard copy inmate files. Too, institution staff may have wrongly identified some inmates as probable EARLY RELEASE candidates. Since that time, a computerized Offender Based Tracking System (OBTS) has been implemented to provide faster and more reliable data on expected release dates. The system will also allow for identification of those in treatment and should reduce untimely transfers.

Another criterion for program selection was "in need of services." BASA certified staff administered standard evaluative instruments such as Jellinek's Questionnaire (Revised Version), Drug Abuse Screening Test (DAST), and Michigan Alcohol Screening Test (MAST) to determine the individual's level of chemical dependency. Drawing from test information the individual was ranked from one to four: no problem to late stage dependency. Chi square analysis of these ranks (Table 23) suggested a high correlation between the reported rank and the Catchment Area. Although most of the inmates were scored as being in the middle stage of dependency, considerably more than would be expected were so identified at WSR, IRCC and CCCC. Diagnosed by the same staff, both WSR and IRCC indicated above average frequencies in the early stages of dependency. Late stage dependency levels were more prevalent at WSP and MICC.

TABLE 23
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
REPORTED LEVEL OF CHEMICAL DEPENDENCY
PERCENTAGE BY TREATMENT CENTER

TREATMENT CENTER		LEVEL OF DEPENDENCY				
		NO PROBLEM	EARLY STAGE	MIDDLE STAGE	LATE STAGE	DON'T KNOW
CCCC	(n=158)	3	20	58	18	1
PCCW	(n=107)	7	31	49	10	3
MICC	(n=143)	3	8	48	38	4
WSR	(n= 72)	3	22	65	6	4
IRCC	(n= 61)	2	30	67	2	0
WSP	(n=183)	7	26	33	27	7
PLCC	(n= 50)	4	16	64	10	6
STATEWIDE						
TOTAL	(N=774)	4	21	51	20	4
Chi Square = 115.898; Significant at Prob = .0001						

Whether these differences were functions of the selection processes, artifacts of the DOP inmate classification system, or matters of subjective judgements cannot be determined. Further discussion of attempts to account for the significantly different diagnoses is found in Attachment C.

"No Problem" and "Don't Know" diagnoses for some of the inmates admitted to the program was a concern for the evaluation. The latter resulted from incomplete screening and referral forms or nonreceipt of the forms. WSP had a significantly higher percentage in both of these categories, the apparent result of the reluctance of some staff to label an offender as chemically dependent during the initial screening. Although attempts were made to correct the situation, a resolution was not achieved until a staff change occurred approximately six months into the WSP program.

No substantive explanation for the inclusion of "no problem" cases in other Catchments was found. It is possible that insufficient time was allowed between the screening and the intake process to properly prioritize the admissions. Another

possibility was that the desire to prove service delivery capability within a limited time span inadvertently caused activities to focus toward recruitment rather than need level. If such were the case it would be expected that the incidence of inappropriate selection would diminish over time. And, in fact, it did. Over 50 percent of all "no problem" and "don't know" admissions were in the first four months of the program. Supervisory feedback increased target accuracy and improved completion of forms after what might be termed a break-in period.

Overall the criterion "in need of service" was met for 92 percent of the treatment population. The remaining 8 percent were almost evenly split between the two questionable categories. Based on control group estimates, this represents an improvement of 10 percent more than what might have occurred with random selection. Discounting the four month break-in period, appropriate selection rose to 95 percent.

The degree of "in need," whether it be early stages of dependency or late stages, may be a moot point given the lack of knowledge regarding the effects of substance abuse treatment. Nevertheless, analysis will proceed on the assumption that the categories mean "something," if only for exploring the possible relationships to outcome measurements.

A third criterion for selection, established by the contract, was that services would be provided without discrimination. The variables included for this analysis are race, sex, age and type of crime. Figure 5 compares the racial distribution of the program participants and the control group. Although there was a tendency toward overrepresentation in the program of minorities other than Blacks, and underrepresentation of White, statistical analysis did not indicate a significant difference.

FIGURE 5
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
RACIAL DISTRIBUTION
CONTROL GROUP AND PROGRAM PARTICIPANTS

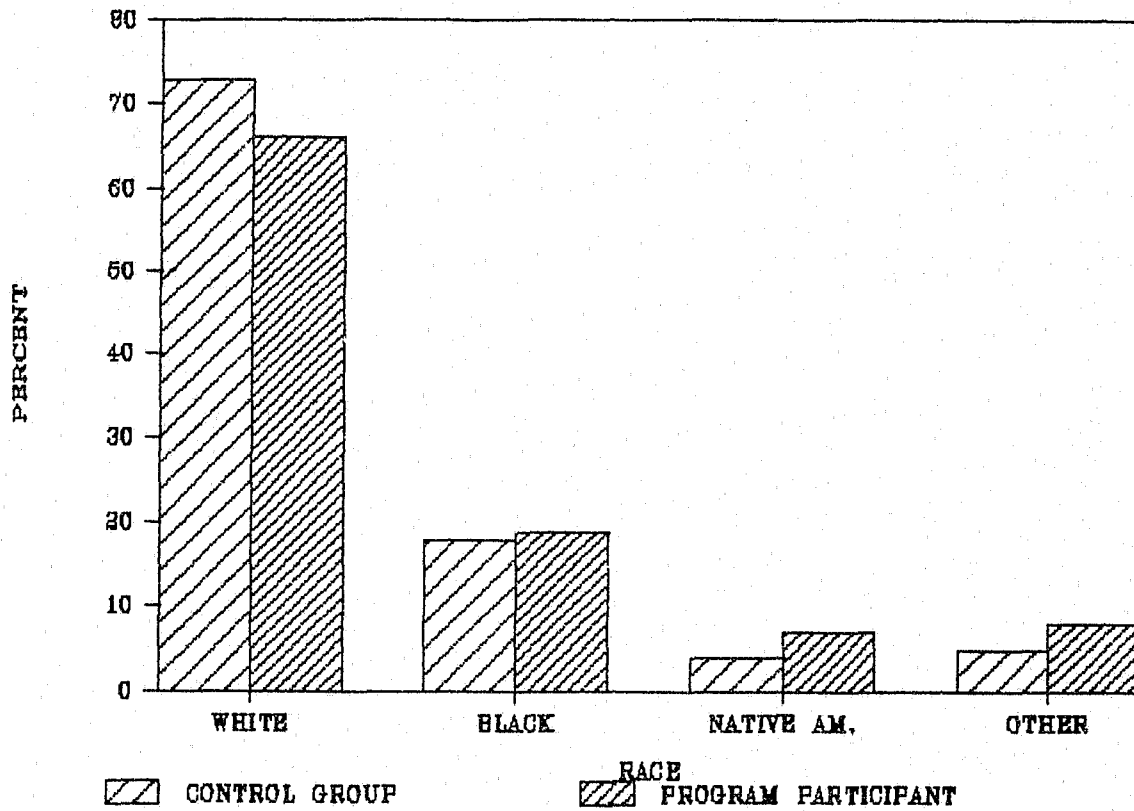


TABLE 24
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
DISTRIBUTION OF SEX WITHIN CONTROL GROUP
AND PROGRAM PARTICIPANTS

SEX	CONTROL GROUP (N = 265)	PROGRAM PARTICIPANTS (N = 774)
Male	94%	86%
Female	6%	14%
TOTAL	100%	100%

Chi Square = 11.47; Significant at Prob = .0007

Analysis of sexual distribution, shown in Table 24, raised some questions.

If women constitute only 3 percent of the prison population, why did they constitute 6 percent of the control group? The answer to that question appears to relate to the fact that women are incarcerated for just over half the length of time that men are, as is shown below. Table 25 indicates the average length of stay combining the control group and those from among the program participants who had released by legitimate means.

TABLE 25
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
LENGTH OF STAY BY SEX
CONTROL GROUP
AND PROGRAM PARTICIPANTS

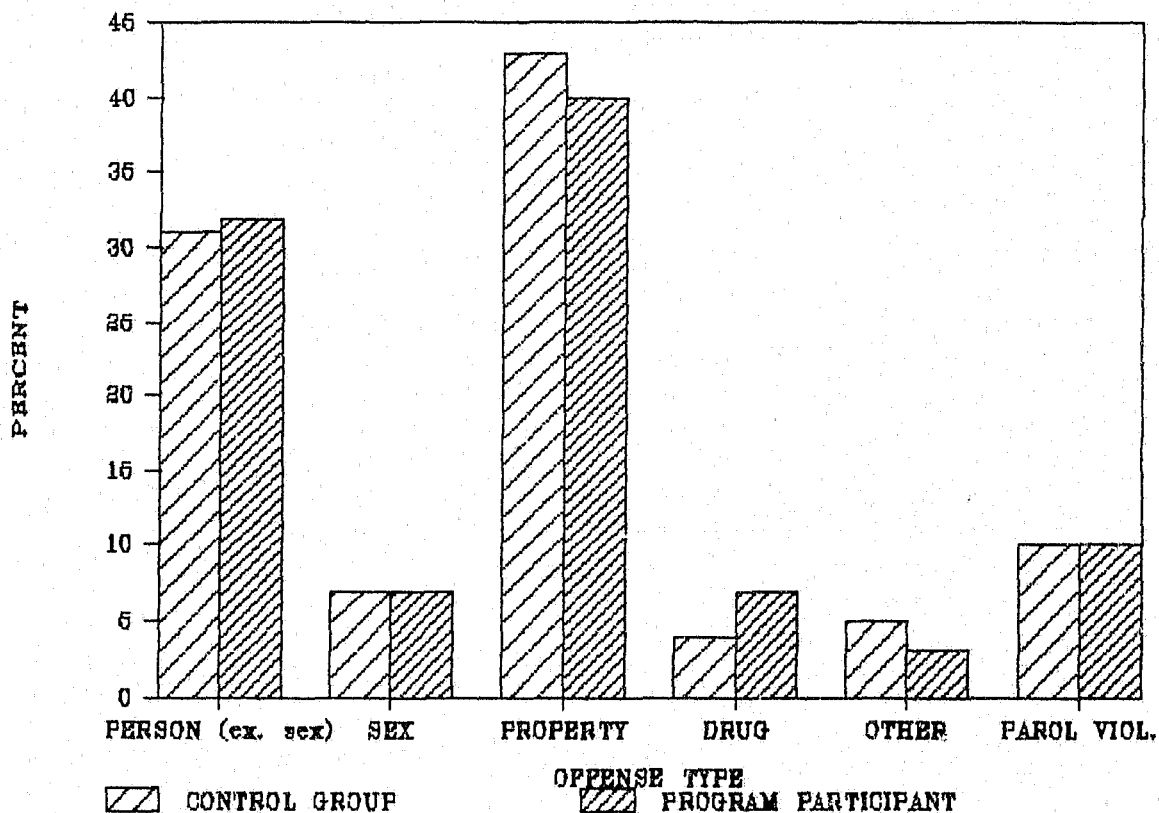
SEX	AVERAGE LENGTH OF STAY (MONTHS)
Male (N = 646)	29.76
Female (N = 87)	17.63
Significant at Prob $t > .0001$	

DOC release data for the period July 1984 through June 1985 indicated that there were 2,340 releases, excluding those released on bond, released to other states, or by death. Based on estimations from the control group, 140 of these were female, 2,200 male. Comparing that figure to the substance abuse treatment program admissions at PCCW, 76 percent of the expected female releases were represented in substance abuse treatment. Following the same logic, the 667 males admitted to treatment represent about 30 percent of the expected male releases. Clearly, women are overrepresented in the substance abuse treatment programs. This is an over-simplistic analysis of a much more complex problem; for instance, it does not account for sexual differences in "need for treatment," but it does suggest that having a full time treatment center in an institution representing only 6 percent of the release population may be a misallocation of treatment staff.

Although the average age of the program participants was slightly higher than the age of the control group, a Student's t test of the means was significant. Age discrimination was not a factor in program selection.

Controlling for early release, program selection did not appear to be influenced by the type of crime committed. Seventeen program participants and 70 of the control group had been granted early release. Figure 6 presents the frequencies of offense types for the two populations, excluding the early releases.

FIGURE 6
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
OFFENSE TYPE BY POPULATION TYPE
(EXCLUDING EARLY RELEASES)



Treatment Process

Having established who substance abuse treatment programs served, analysis now shifts to what services were provided. The hours of service were divided into two modes: individual and group. Individual hours included screening hours for those admitted to the program as well as individual counseling and pre-release planning. Group hours included substance abuse education, skills training and group counseling.

The total program hours for each Catchment, along with the percentage of statewide hours represented within each treatment mode, are presented on Table 26. On Table 27, treatment hours are presented by treatment center, and treatment mode is expressed as a percentage of each treatment center's program.

TABLE 26
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
PROGRAM HOURS BY CATCHMENT

PROGRAM CATCHMENT	INDIVIDUAL HOURS	GROUP HOURS	TOTAL HOURS
I (n=158)	772 (19%)	8,854 (40%)	9,626 (36%)
II (n=250)	1,249 (30%)	2,096 (09%)	3,345 (13%)
III (n=133)	600 (15%)	5,693 (25%)	6,293 (24%)
IV (n=233)	1,480 (36%)	5,746 (26%)	7,226 (27%)
TOTAL (N=774)	4,101 (100%)	22,389 (100%)	26,490 (100%)

TABLE 27
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
PROGRAM HOURS BY TREATMENT CENTER

TREATMENT CENTER	INDIVIDUAL HOURS	GROUP HOURS	TOTAL HOURS
CCCC (n=158)	772 (8%)	8,854 (92%)	9,626 (100%)
PCCW (n=107)	528 (38%)	873 (62%)	1,401 (100%)
MICC (n=143)	721 (37%)	1,223 (63%)	1,944 (100%)
WSR (n= 72)	306 (9%)	3,005 (91%)	3,311 (100%)
IRCC (n= 61)	294 (10%)	2,689 (90%)	2,983 (100%)
WSP (n=183)	1,246 (21%)	4,797 (79%)	6,043 (100%)
PLCC (n= 50)	234 (20%)	949 (80%)	1,183 (100%)
TOTAL (N=774)	4,101 (15%)	22,390 (85%)	26,491 (100%)

Consistency within those Catchments encompassing more than one treatment facility can be clearly identified in terms of relationships in the percentages of treatment modalities. Catchment II, treatment centers PCCW and MICC, concentrated more of the program hours on the individual mode. WSR and IRCC, in Catchment III, were both similar to each other and to Catchment I. WSP and PLCC, though consistent within their Catchment, represented yet another modality balance that fell between the extremes of Catchment I and Catchment II.

Attention turned to analysis of average hours per client (Table 28). From this perspective, most of the seeming differences in individual hours of treatment disappear. Except for WSP, the treatment centers were surprisingly uniform in the average time spent on this service. It is in the area of group hours that wide disparities occur. Clearly evident are the very low average group activity hours presented in Catchment II. Part of the explanation for MICC might have been the very limited classroom space available. However, for both treatment centers in that Catchment, over enrollment and admissions to treatment on a flow basis combined to produce a markedly uneven program. For analyzing the effects of treatment on outcome measures, the total time or the group time would seem to be a more useful comparison variable than the more homogenous individual time, except for the possible effects of WSP's additional individual attention.

TABLE 28
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
AVERAGE HOURS BY TREATMENT CENTER

TREATMENT CENTER	AVERAGE INDIVIDUAL HOURS	AVERAGE GROUP HOURS	AVERAGE TOTAL HOURS
CCCC (n = 158)	4.9	56.0	60.9
PCCW (n = 107)	4.9	8.2	13.1
MICC (n = 143)	5.0	8.6	13.6
WSR (n = 72)	4.2	41.7	45.9
IRCC (n = 61)	4.8	44.1	48.9
WSP (n = 183)	6.8	26.2	33.0
PLCC (n = 50)	4.7	19.0	23.7

The average hours, for those who completed the program, and the standard deviations are the subject of Table 29. The standard deviation is a good indicator of the variation in treatment hours, and relates to the process expectation that there would not be significant variation in the hours of service provided those completing the program within a given Catchment Area.

For instance, WSR, with an average of 4.9 individual hours, has a standard deviation of plus or minus .9 hours, indicating that most of the offenders received between 4 and 5.8 individual hours. Most of those completing the program at PCCW received from 2 to 8.8 individual hours. The same situation exists analyzing group hours. A standard deviation of 7.2 with a mean of 62.6 is insignificant compared to a smaller deviation of 5.4 with a mean of 9.6. The Tukey's HSD test indicated that all treatment centers were significantly different from one another in total hours provided, with the exception of the comparison between MICC and PCCW and the comparison between WSR and IRCC.

TABLE 29
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
AVERAGE HOURS FOR COMPLETIONS

TREATMENT CENTER	INDIVIDUAL HOURS		GROUP HOURS		TOTAL HOURS	
	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
CCCC (n = 132)	5.4	1.5	62.6	7.2	68.0	7.4
PCCW (n = 84)	5.4	3.4	9.6	5.4	15.0	6.5
MICC (n = 92)	6.1	2.7	11.4	6.9	17.5	7.9
WSR (n = 52)	4.9	.9	52.1	7.2	57.0	7.7
IRCC (n = 51)	5.4	1.3	50.3	3.9	55.7	4.3
WSP (n = 127)	8.5	2.7	33.0	7.6	41.6	8.9
PLCC (n = 32)	5.2	1.5	23.4	4.0	28.6	4.2

Judgements regarding acceptable levels of deviation are necessarily subjective until any relationship is found between treatment mode and treatment outcome. In general there was more variance in group hours than in individual.

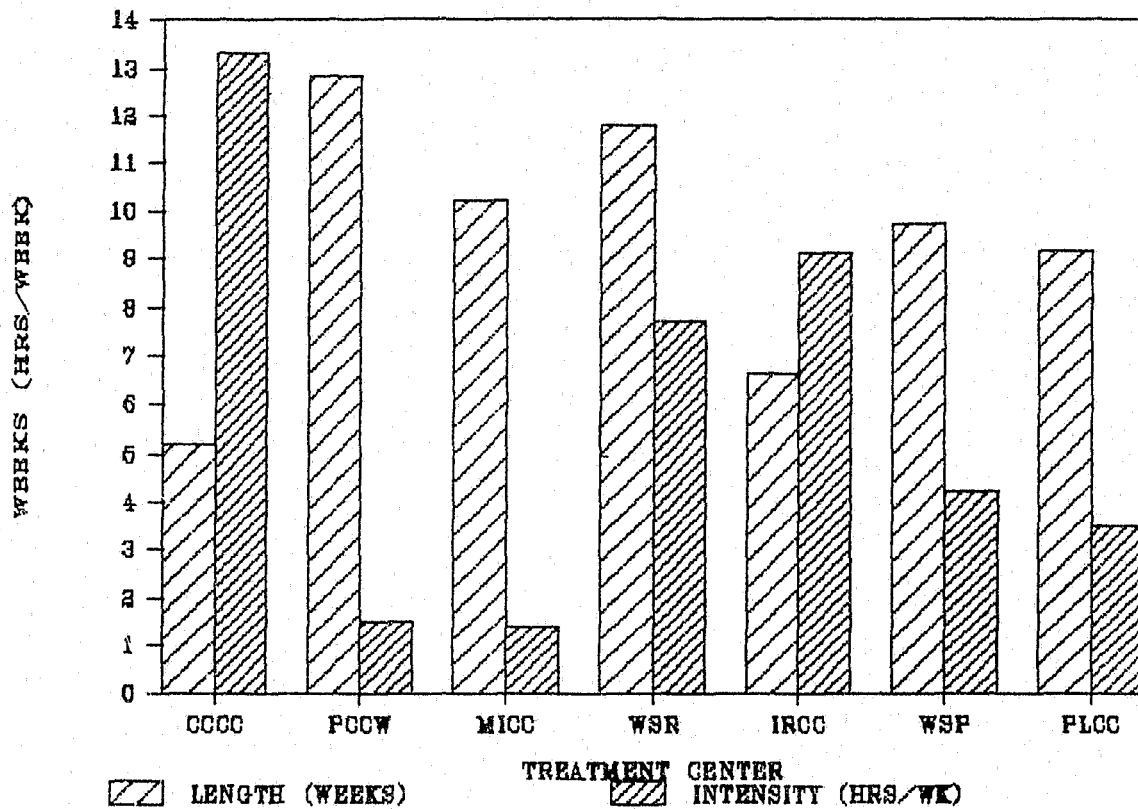
Average treatment hours for those completing the program and those who dropped are compared on Table 30. It could be argued that time spent on individuals who dropped treatment was nonproductive time. With this viewpoint, the higher the ratio of average time spent on completions vis-a-vis drops the more productive the program. Thus, IRCC, WSR, and WSP with time ratios of more than three hours for completions to every one hour for dropouts would be the most productive and PLCC with less than two hours for completions to every hour for dropouts would be the least. On the other hand, it has been widely accepted that the provision of some treatment results in better outcomes than no treatment. In this sense ALL program time may be considered productive. Further judgement will have to rest with the outcome analyses.

TABLE 30
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
AVERAGE HOURS FOR PROGRAM COMPLETIONS AND DROPS

TREATMENT CENTER		INDIVIDUAL AVERAGE HOURS	IND HRS	GROUP HOURS	AVERAGE GRP HRS	TOTAL HOURS	AVERAGE TOT HRS
CCCC							
Completions	(n = 132)	711	5.4	8,269	62.6	8,980	68.0
Drops	(n = 26)	62	2.4	585	22.5	647	24.9
PCCW							
Completions	(n = 84)	457	5.4	806	9.6	1,263	15.0
Drops	(n = 23)	71	3.1	67	2.9	138	6.0
MICC							
Completions	(n = 92)	560	6.1	1,049	11.4	1,609	17.5
Drops	(n = 51)	162	3.2	174	3.4	336	6.6
WSR							
Completions	(n = 52)	253	4.9	2,711	52.1	2,964	57.0
Drops	(n = 20)	52	2.6	294	14.7	346	17.3
IRCC							
Completions	(n = 51)	273	5.4	2,567	50.3	2,840	55.7
Drops	(n = 10)	21	2.1	122	12.2	143	14.3
WSP							
Completions	(n = 127)	1,086	8.5	4,193	33.0	5,279	41.6
Drops	(n = 56)	160	2.9	604	10.8	764	13.6
PLCC							
Completions	(n = 32)	166	5.2	750	23.4	916	28.6
Drops	(n = 18)	68	3.7	199	11.0	267	14.8

The average length of each program is profiled on Figure 7 along with a calculated variable "Intensity." Intensity represents the number of program hours divided by the number of weeks between program admission and program termination. However, it should be noted that this average does not take into account the actual number of days per week that treatment was provided. Thus, it is only an indicator of treatment center differences.

FIGURE 7
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
PROGRAM LENGTH AND INTENSITY FOR COMPLETIONS
BY TREATMENT CENTER



CCCC, with the shortest program, provided an average of 13.3 hours per week, for those who completed the program, while PCCW, with the longest program, provided 1.5 hours per week. It is not the intent here to judge which Catchment provided the best service. Quality of time cannot be measured, but this presentation should acquaint the reader with some of the constructs that will be used in outcome evaluation.

Completion Rate

Finally, there was the process expectation that 20 percent of those admitted to treatment would complete the program.

The expectation was more than met with a statewide completion rate of 74 percent. The completion rate by treatment center is referenced on the following table.

TABLE 31
SUBSTANCE ABUSE PROGRAM PROCESS EVALUATION
PERCENT OF ADMISSIONS COMPLETING TREATMENT

TREATMENT CENTER	COMPLETION RATE
CCCC	83.5
PCCW	78.5
MICC	64.3
WSR	72.2
IRCC	83.6
WSP	69.4
PLCC	64.0

Summary Discussion

All Catchments exceeded the expectation of a 20 percent completion rate. CCCC and IRCC topped the list with nearly 84 percent completing the program. Clearly, the expectation was based on questionable assumptions. The 507 completions within the year represents over 28 percent of the 2,000 estimated target population.

The criterion of offering service only to those in need of treatment was 8 percent short of perfection if those admitted without identification of their level of need were considered "not in need." The incidence of including inmates identified as not having problems with chemical dependency seemed to decline over time.

The process expectation that offenders would be within one year of release was not fully met. Discounting escapees, 59 percent of the program participants had been released within one year of entering the program. Of these, approximately 5 percent had been released prior to completing the program. Looking at the 306 remaining in prison on September 30, 1985, 61 percent are still within the guideline period. Should all of these be released within a year of program admission the overall success rate will be 80 percent. Based on the percentages of those who have extended beyond a year, it appears unlikely that this percentage will be achieved. There were substantial differences between the Catchment performances on this critical issue suggesting that efforts need to be made to identify the source of error if the aid of the Offender Based Tracking System does not improve the validity of selection.

For those Catchments which had proposed structured programs the program length appeared to fit well with their contract agreements. Variations in total hours provided to those offenders completing the programs were similar within each treatment center with the exception of PCCW and MICC. The standard deviations for the latter amounted to almost half of the mean.

With the exceptions of WSP, where more individual hours were provided than in all other centers, there were no other significant differences in individual hours. Group hours, however, varied widely not only between treatment centers, but within each center. Whether or not this is problematical is a question to be addressed by the outcome evaluation.

No evidence of discriminatory practices were identified with the possible exception of the overrepresentation of women. This is inherent in the selection of treatment centers and may not be easily overcome without denying treatment to women altogether.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

The first year of substance abuse treatment exceeded the expectations for both the numbers accepted and the numbers completing the programs. Although over 20 percent of the in-need population received treatment, there is still an unmet need for approximately 1500 to 1600 releasing offenders each year. In addition, the over representation of women in the current treatment population continues as of this writing. If treatment cannot affordably be provided to all in need, then perhaps it could at least be adjusted to include a like proportion of male offenders.

The expectation of treating those persons in need who were within one year of release was met with mixed success. The installation of the Offender Based Tracking System (OBTS), and the many enhancements to that system, have resolved some of the process problems. Stages of treatment - screened and referred to the program, waiting program service, admission and completion dates -can now be identified for each offender. This should mean fewer terminations due to institutional transfers. Recent judicial directives that may result in the release of many offenders well before their formerly expected release dates are likely to increase the difficulties associated with trying to provide service to those who are within one year of release. It will be imperative that the substance abuse treatment program administration continue to monitor admissions to assure that objectives regarding the treatment population in need of service and within one year of release are met.

Some general expectations of the treatment process were: treatment hours would be similar within Catchments and completion rates would be similar between Catchments. Catchment II and the subcontracted Catchment IVA seemed to have had the most problems. Catchment II experienced high drop rates, service hours were fewer and spread over a longer period than others. They also had a higher proportion of admissions remaining in prison for over one year. Catchment IVA had a high frequency of drops by transfer, an event beyond the control of the treatment staff, and a hiatus in treatment provision due to loss of staff. While quality control to assure similar treatment in terms of numbers of hours and program content is difficult to monitor, this has been done well and must continue.

The contractor for Catchment II was replaced in the second year of the substance abuse treatment programs. The contract was awarded to STOP along with renewal of their contract for Catchment I. The subcontract in Catchment IVA expired and was not renewed by CAC who elected to service PLCC with their own staff.

The needed changes that were made prior to the second year of the treatment program indicate the responsiveness of the Department of Corrections administration and the commitment to providing quality service. The legislature has already allocated continuing funds for the coming biennium. Expansion funds have been requested to provide services in the work release facilities.

An upcoming analysis will tackle the questions of what effects these programs have on program participants' in-prison behavior after treatment and on recidivism.

**SUBSTANCE ABUSE PROGRAM ADMISSION**

AGENCY

NAME

(FOR AGENCY USE ONLY—DO NOT CODE)

INMATE

NAME

(FOR AGENCY USE ONLY—DO NOT CODE)

1. PROJECT CODE

8 4 0 2 A D 1 0 1

CARD 1

1-9

2. INMATE DOC NUMBER:

10-15

3. CATCHMENT NUMBER:

16

PLEASE CODE THE FOLLOWING DATES WITH THE YEAR
IN THE LEFT BOXES FOLLOWED BY THE MONTH AND THE
DAY.

4. DATE OF BIRTH:

17-22

5. DATE OF ADMISSION TO PRISON:

23-28

6. DATE OF ADMISSION TO THE
SUBSTANCE ABUSE PROGRAM:

29-34

7. EARLIEST POSSIBLE RELEASE
DATE: (IF UNKNOWN LEAVE BLANK)

35-40

CLIENT CHARACTERISTICS

8. SEX: MALE=1 FEMALE=2

41

9. RACE: WHITE=1 BLACK=2 AMERICAN
INDIAN=3 OTHER=4

42

10. SUBSTANCE ABUSED:
ALCOHOL=1 DRUGS=2 BOTH=3

43

11. USAGE OF ALCOHOL IN YEAR PRIOR TO ARREST:

DAILY=1
4-6 TIMES PER WEEK=2
2-3 TIMES PER WEEK=3
ONCE A WEEK=4
LESS THAN ONCE A WEEK=5
MORE THAN ONCE A MONTH=6
LESS THAN ONCE A MONTH=7
BINGE USER=8
NO USAGE=9

44

12. USAGE OF DRUGS IN YEAR PRIOR TO ARREST:

DAILY=1
4-6 TIMES PER WEEK=2
2-3 TIMES PER WEEK=3
ONCE A WEEK=4
LESS THAN ONCE A WEEK=5
MORE THAN ONCE A MONTH=6
LESS THAN ONCE A MONTH=7
BINGE USER=8
NO USAGE=9

45

ARREST INFORMATION:

13. UNDER THE INFLUENCE OF DRUGS OR
ALCOHOL AT TIME OF ARREST?
YES=1 NO=2 DON'T KNOW=9

46

14. CRIME COMMITTED TO GAIN FUNDS FOR
OBTAINING DRUGS OR ALCOHOL?
YES=1 NO=2 DON'T KNOW=9

47

15. ARREST RELATED TO DELIVERY OR AT-
TEMPTED DELIVERY OF ILLEGAL DRUGS
OR ALCOHOL?

48

YES=1 NO=2 DON'T KNOW=9

PRIOR TREATMENT

16. HAD PARTICIPATED IN INPATIENT TREAT-
MENT FOR SUBSTANCE ABUSE?

YES AND COMPLETED=1
YES, DID NOT COMPLETE=2
NO=3
DON'T KNOW=9

49

17. HAD PARTICIPATED IN OUTPATIENT
THERAPY, NOT AA OR NA?

YES AND COMPLETED=1
YES, DID NOT COMPLETE=2
NO=3
DON'T KNOW=9

50

18. HAD PARTICIPATED IN AA OR NA?

YES, CURRENTLY=1
YES, PRIOR TO INCARCERATION=2
NO=3
DON'T KNOW=9

51

FAMILY AND FINANCIAL BACKGROUND

19. IS THERE A FAMILY UNIT TO WHOM
COUNSELING WILL BE OFFERED?

YES=1 NO=2 DON'T KNOW=9

52

20. EMPLOYMENT HISTORY

WORKED ALL OF YEAR PRIOR TO ARREST=1
WORKED LESS THAN 1 YEAR MORE THAN
9 MONTHS=2
WORKED LESS THAN 9 MONTHS MORE
THAN 6 MONTHS=3
WORKED LESS THAN 6 MONTHS IN
YEAR PRIOR TO ARREST=4
DID NOT WORK IN YEAR PRIOR TO
ARREST=5

53

21. AVERAGE MONTHLY INCOME
PRIOR TO ARREST, INCLUDE
LEGAL INCOME ONLY

(CODE ROUNDED DOLLAR AMTS.)

54-58

AGENCY
NAME

INMATE
NAME

(FOR AGENCY USE ONLY—DO NOT CODE)

(FOR AGENCY USE ONLY—DO NOT CODE)

SUBSTANCE ABUSE EVALUATION—PRISON HISTORY

TREATMENT DATE _____

1. DOC NUMBER

2. MOST SERIOUS RCW _____ CODE

3. NUMBER OF PRIOR COMMITMENTS _____

IF CODING CONTROL GROUP SKIP TO QUESTION 6.

4. TOTAL NUMBER OF SUBSTANCE ABUSE INFRACTIONS PRIOR TO TREATMENT

5. TOTAL NUMBER OF OTHER MAJOR INFRACTIONS PRIOR TO TREATMENT

CODE CONTROL GROUP AS POST TREATMENT

6. TOTAL NUMBER OF SUBSTANCE ABUSE INFRACTIONS POST TREATMENT

7. TOTAL NUMBER OF OTHER MAJOR INFRACTIONS POST TREATMENT

8. RELEASE DATE _____ / _____ / _____
YEAR MONTH DAY

9. TYPE OF RELEASE: PAROLE=1, DISCHARGE=2, DEATH=3

10. PAROLED TO INPATIENT SUBSTANCE ABUSE PROGRAM YES=1, NO=2

PAROLE OFFICE
PAROLE OFFICER
TELEPHONE

11. DATE RETURNED TO PRISON _____ / _____ / _____
YEAR MONTH DAY

12. REASON FOR RETURN PAROLE VIOLATION=1 NEW FELONY CONVICTION=2

13. IF NEW CONVICTION CRIME TYPE _____ CODE

14. REOFFENSE RELATED TO SUBSTANCE ABUSE YES=1, NO=2

CARD

2

1

POPULATION #

1

2

3-8

9-14

15-18

17-18

19-20

21-22

23-24

25-30

31

32

33-36

39

40-43

44

ATTACHMENT B

ALCOHOL/DRUG PROGRAM

ASSESSMENT AND TREATMENT RECOMMENDATIONS

TO: _____
CLASSIFICATION COUNSELOR

DATE: _____

FROM: _____
SUBSTANCE ABUSE COUNSELOR

SUBJ: _____
#

The above named inmate has been screened and assessed by the Alcohol/Drug Program staff and the following was determined:

DIAGNOSTIC IMPRESSION

- ☐ No significant problem
- ☐ Early phase chemical dependency
- ☐ Middle phase chemical dependency
- ☐ Late phase chemical dependency

CHARACTERIZED BY: _____

- ☐ Refused interview
- ☐ Refused treatment

TREATMENT RECOMMENDATION

- ☐ No treatment recommended
- ☐ Refer to DOC designated alcohol/drug treatment unit
- ☐ Refer to A.A./N.A. at present institution
- ☐ Refer to A.A./N.A. at WTR or parole
- ☐ Refer to community based in-patient program
- ☐ Refer to community based out-patient program
- ☐ Antabuse
- ☐ Refer to Alcohol/Drug Program education classes/workshop

COMMENTS: _____

Substance Abuse Counselor

ATTACHMENT C

THE LEVEL OF DEPENDENCY

A parameter established by the Washington State Legislature for the provision of substance abuse treatment in the prison system was that inmates treated must be in need of treatment.

Treatment staff administered three different tests in screening the prison population. One, MAST, was reviewed by the research staff at the time the methodology was being formulated. It was noted that the questions were arranged to reflect a progression of dependency. This suggested the possibility of categorizing respondents by the stages of the developing problem -- early phase, middle phase, late phase. The rationale was that the outcome analysis might be affected by the severity of dependency. If such proved true, future programs could focus treatment on those shown to be most receptive to intervention.

The reliability of the diagnostic instrument in a prison setting was a major research concern. MAST, as well as the other two screening tests, was designed for use with a voluntary treatment population (it is questionable that the inmate treatment programs are truly voluntary). Further, it was completely reliant on self-reporting, which could be biased given the gestalt of a prison social structure and pressures to conform.

As the Assessment and Referral forms (see Attachment B) were received in the research unit, another concern surfaced. Qualifying statements such as, "early late stage", "late middle stage", suggested that, at the very least, too few categories had been selected. More importantly, the written comments pointed up the difficulty of reducing the multi-dimensional phenomena of dependency to a quasi-linear progression scale.

As noted in the body of the evaluation report, levels of dependency showed a significant correlation with the treatment center. In an attempt to establish whether or not the finding was due to observer bias, the data were analyzed for related variable correlations. Types of substance abused (drugs, alcohol, or both) correlated with the treatment center. Consequently, type of substance abused correlated with level of dependence. Yet, there is no explanation for types of substance abused to be other than randomly distributed through the DOP population. And, in fact, type of substance abused did not correlate with standard classification criteria such as type of crime, age, or number of prior offenses. Until there is evidence that the type of substance abused correlates with an independent classification variable, we can only assume the correlation between levels of dependency and catchments are spurious - probably caused by observer bias.