

**SEVENTH ANNUAL REPORT ON THE EVALUATION OF THE
CALIFORNIA SUBSTANCE ABUSE TREATMENT FACILITY (SATF-SAP)
AND STATE PRISON AT CORCORAN**

**Submitted to
The California Department of Corrections
Office of Substance Abuse Programs**

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PREFACE

The UCLA Integrated Substance Abuse Programs (UCLA-ISAP) is operating under an agreement with the California Department of Corrections, Office of Substance Abuse Programs (CDC-OSAP) to conduct an extended evaluation of the California Substance Abuse Treatment Facility, Substance Abuse Program (SATF-SAP) to examine the possible improvements in recidivism (e.g., return-to-prison) outcomes associated with the ongoing maturation of the SATF-SAP over a period of four years. Additionally, UCLA-ISAP will work collaboratively with Sheldon Zhang, PhD., San Diego State University, to conduct a cost-benefit analysis.

This report summarizes findings from the first year of this evaluation, and is submitted pursuant to the approved scope of services that calls for an annual report on or before August 15th of each project year.

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The SATF-SAP at Corcoran is a 1,478-bed therapeutic community (TC) that serves Level I and II inmates who have substance use disorders. The SAP is housed in two separate secure facilities: F and G, with each treatment facility consisting of three housing units of four 44-bed treatment clusters. Inmates in Facilities F and G are completely separated from the general prison population.

The TC model was chosen for the SATF because its effectiveness has been demonstrated in a number of prison settings such as the Stay'n Out program in New York, the Key-CREST program in Delaware, and the Amity Program in California. Aside from some minor differences, both the Walden House (Facility F) and Phoenix House (Facility G) programs adhere to the same basic TC philosophy and structure. The in-prison treatment lasts from 6 to 18 months, and continued participation in community treatment services is strongly encouraged (and funded for up to 150 days for 50% of program graduates). While participation in the prison-based phase of treatment is mandated for those deemed to be in need of treatment, continued treatment in the community is voluntary.

The purpose of this report is to summarize the results of UCLA's continuing evaluation of the SATF-SAP. Specifically, this report describes (1) the outcomes of successive parolee cohorts, and (2) the steps taken in cooperation with San Diego State University to begin the cost-benefit analysis. (For more information on these findings, see the Technical Report.)

I. Outcome Analysis of Successive SATF-SAP Cohorts

The primary goals of this portion of the evaluation were to (1) analyze data from successive release cohorts (7/00-12/00 [n=424], 1/01-6/01 [n=589], 7/01-12/01 [n=556], 1/02-6/02 [n=739], and 7/02-12/02 [n=764]) from the SATF-SAPs to determine whether outcomes have improved over time; (2) contrast recidivism outcomes among those receiving at least 90 days of aftercare with those who receive fewer days or none at all; and (3) disaggregate results by mental health (CCCMS) and sex offender (r-suffix) status.

- Overall, the percentages of SATF-SAP parolees (by cohort) who attend some form of aftercare have ranged from 25% to 36%. The percentages of parolees who attend aftercare for at least 90 days have remained relatively constant, with about one out of five parolees meeting this standard.
- For the most recent cohorts on whom recidivism data were available (1/01-6/01 and 7/01-12/01), participation in aftercare for at least 90 days was associated with a 40% reduction in recidivism,¹ compared with those who received less than 90 days of aftercare or none at all.
- Parolees who are classified as having mental health problems (CCCMS or EOP) generally have been more likely to participate in aftercare for at least 90 days than non-

¹ This is a "raw" percentage reduction that does not take into account other potentially confounding differences between these two groups.

CCCMS parolees, although these two groups appear to have converged in the most recent release cohort.

- Sex offenders, relative to non-sex offenders, have consistently been less likely to attend aftercare and remain for at least 90 days.
- Regarding 12-month recidivism, there was no statistically significant difference between CCCMS and non-CCCMS parolees. However, sex offenders were more likely than non-sex offenders to be returned to custody within 12 months across all release cohorts.
- After controlling for age, race/ethnicity, mental health problems, and sex-offender status, we found that participation in aftercare for at least 90 days was associated with a .54 reduction in the odds of being returned to custody within 12 months.²

II. Cost Analysis

Collaboration on the cost benefit analysis, specifically the sharing of data, between UCLA-ISAP and Sheldon Zhang, Ph.D., San Diego State University (SDSU) could begin only after the study protocols received the approval of both institutions' Institutional Review Board (IRB). Final UCLA-IRB approval was granted on July 15, 2003.

After receiving approval, UCLA-ISAP mailed a SAS dataset of the combined baseline and follow-up interview data, OBIS data, and aftercare data that were used to conduct the original outcome study of the SATF-SAP to Dr. Zhang. A meeting with Dr. Zhang and UCLA-ISAP will take place in September 2003 to address any questions he may have regarding these data.

III. Conclusions

- Our analysis of the SATF-SAP recidivism data on successive release cohorts reveals a strong association between participation in some form of aftercare for at least 90 days and reduced recidivism risk during the first year following release. This association was strongest for the two most recent release cohorts for whom 12-month recidivism data are available.
- Across these release cohorts, the percentage of parolees who have participated in aftercare for at least 90 days has remained close to 20%.
- Our data illustrate a relationship between aftercare participation and reduced recidivism. The strength of this relationship supports the need to develop additional strategies to increase the likelihood that SATF-SAP parolees enter and remain in aftercare for at least 90 days.

² This estimated reduction in risk differs from the 40% mentioned earlier because the former did not take into account other individual differences that were associated with recidivism risk. The 54% figure should be considered an "adjusted" estimate that controls for other standard background factors.

**SEVENTH ANNUAL REPORT ON THE EVALUATION OF THE CALIFORNIA
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Technical Report

The SATF-SAP at Corcoran is a 1,478-bed therapeutic community (TC) that serves Level I and II inmates who have substance use disorders. The SAP is housed in two separate secure facilities: F and G, with each treatment facility consisting of three housing units of four 44-bed treatment clusters. Inmates in Facilities F and G are completely separated from the general prison population.

The TC model was chosen for the SATF because its effectiveness has been demonstrated in a number of prison settings such as the Stay'n Out program in New York, the Key-CREST program in Delaware, and the Amity Program in California. Aside from some minor differences, both the Walden House (Facility F) and Phoenix House (Facility G) programs adhere to the same basic TC philosophy and structure. The in-prison treatment lasts from 6 to 18 months, and continued participation in community treatment services is strongly encouraged (and funded for up to 150 days for 50% of program graduates). While participation in the prison-based phase of treatment is mandated for those deemed to be in need of treatment, continued treatment in the community is voluntary.

The purpose of this technical report is to provide additional detail regarding the results of UCLA's continuing evaluation of the SATF-SAP. Specifically, this report describes (1) the outcomes of successive parolee cohorts, and (2) the steps taken in cooperation with San Diego State University to begin the cost-benefit analysis.

I. Outcome Analysis of Successive SATF-SAP Cohorts

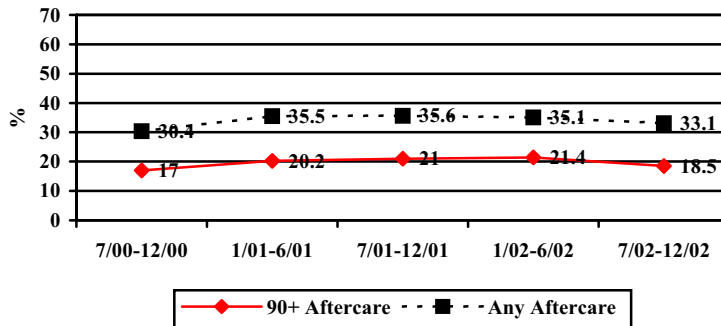
The primary goals of this portion of the evaluation were to (1) analyze data from successive release cohorts (7/00-12/00 [n=424], 1/01-6/01 [n=589], 7/01-12/01 [n=556], 1/02-6/02 [n=739], and 7/02-12/02 [n=764]) from the SATF-SAPs to determine whether outcomes have improved over time; (2) contrast recidivism outcomes among those receiving at least 90 days of aftercare with those who receive fewer days or none at all; and (3) disaggregate results by mental health (CCCMS) and sex offender (r-suffix) status.

These data are based on the Initial Assessment, Admit/Discharge, and aftercare participation data submitted to ISAP by the institutions-based substance abuse programs (SAPs) and the Substance Abuse Services Coordinating Agencies (SASCAs). In addition, 12-month recidivism (defined as return to prison for any reason) was based on the Offender-Based Information System (OBIS) database maintained by the California Department of Corrections.

As shown in Figure 1, the percentage of SATF-SAP parolees who have attended some form of aftercare has ranged from 25% to 36% since July of 2000 (χ^2 [4, N=3,072]=4.2, p=.37). The percentage of parolees (by cohort) who have attended aftercare for at least 90 days has remained relatively constant, with about one out of five parolees meeting this standard (see Figure 1; χ^2 [4, N=3,072]=4.8, p=.31). In neither case are the differences between release cohorts statistically

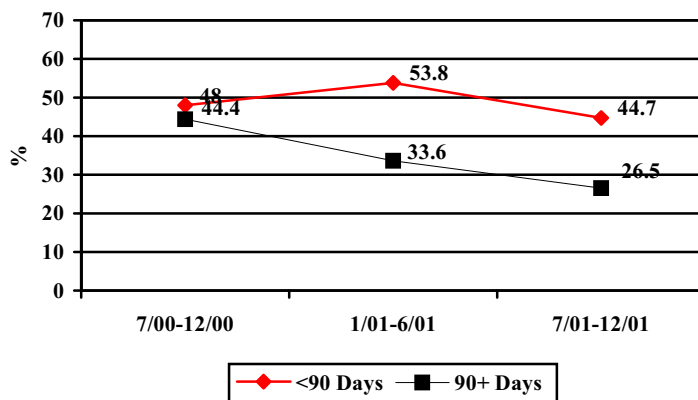
significant.³

Figure 1: Percent of SATF-SAP Parolees Attending Aftercare by Cohort (N=3,037)



As shown in Figure 2, there is a strong relationship between aftercare participation and 12-month recidivism—particularly for the last two cohorts for which 12-month outcomes can be obtained (1/01-6/01 and 7/01-12/01). In fact, for these two cohorts combined, participation in aftercare was associated with a 40% reduction in recidivism ($\chi^2 [1, N=1,145]=28.2, p<.0001$).

Figure 2: 12-Month Recidivism by Aftercare Participation and Cohort (N=3,037)



As shown in Figure 3, CCCMS parolees in two of the release cohorts were more likely to participate in aftercare for at least 90 days than non-CCCMS parolees (1/01-6/01 cohort: $\chi^2 [1, N=589]=4.4, p<.05$; 7/01-12/01 cohort: $\chi^2 [1, N=556]=7.2, p<.01$), although these two groups appear to have converged in the most recent release cohort. Conversely, sex offenders, relative to

³ We have elected to use the .05 criterion for statistical significance for two reasons. First, alphas of .05 are considered to be the standard in social science disciplines, although more liberal cutoffs are sometimes employed when conducting exploratory research or pilot tests. Second, the large sample size used in this evaluation creates substantial statistical power, making certain differences statistically significant that are not necessarily relevant from a clinical or policy perspective. Thus, maintaining the .05 alpha criterion for significance helps us distinguish reliable trends from spurious variations.

non-sex offenders, have consistently been less likely to attend aftercare and remain for at least 90 days (overall test for combined cohorts: $\chi^2 [1, N=3,072]=21.8, p<.0001$; see Figure 4).

Figure 3: Percent of SATF Parolees Attending at Least 90 Days of Aftercare by Cohort and CCCMS Status (N=3,037)

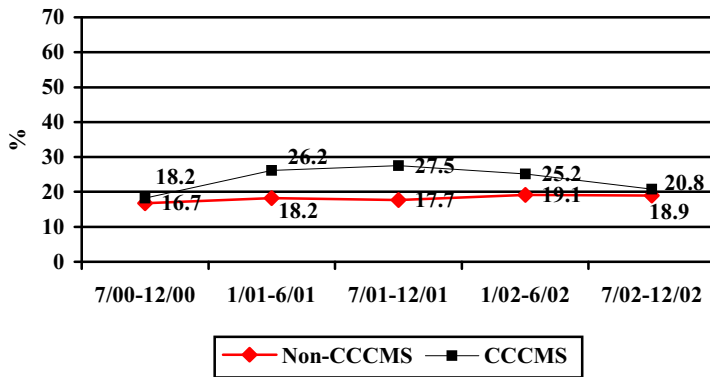
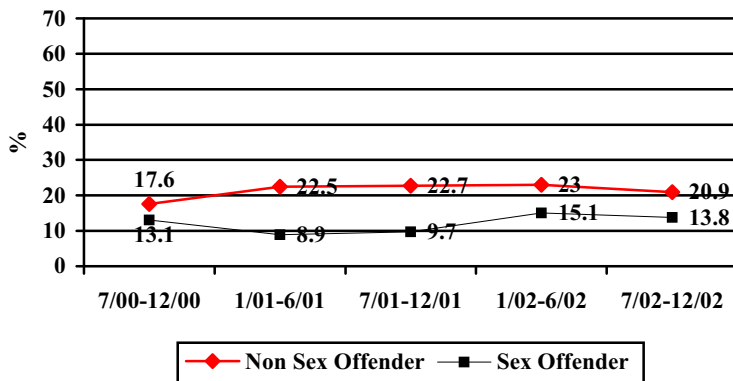


Figure 4: Percent of SATF Parolees Attending at Least 90 Days of Aftercare by Cohort and Sex Offender Status (N=3,037)



Regarding 12-month recidivism, there was no statistically significant difference between CCCMS and non-CCCMS parolees ($\chi^2 [1, N=3,072]=.06, p=.81$). However, sex offenders were more likely than non-sex offenders to be returned to custody within 12 months across all three release cohorts ($\chi^2 [1, N=1,569]=9.3, p<.01$; see Figures 5 and 6).

Figure 5: 12-Month Recidivism by Cohort and CCCMS Status (N=3,037)

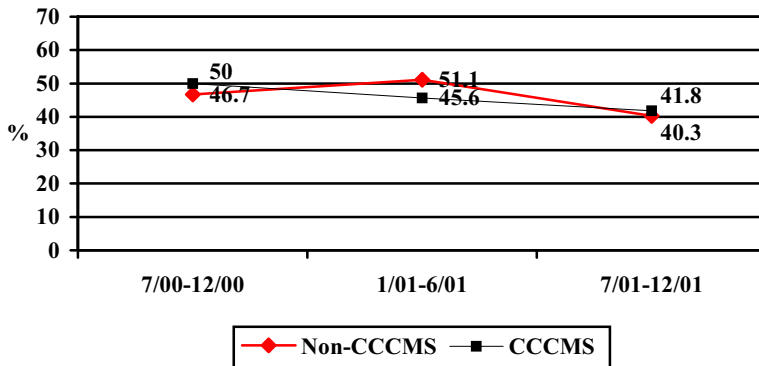
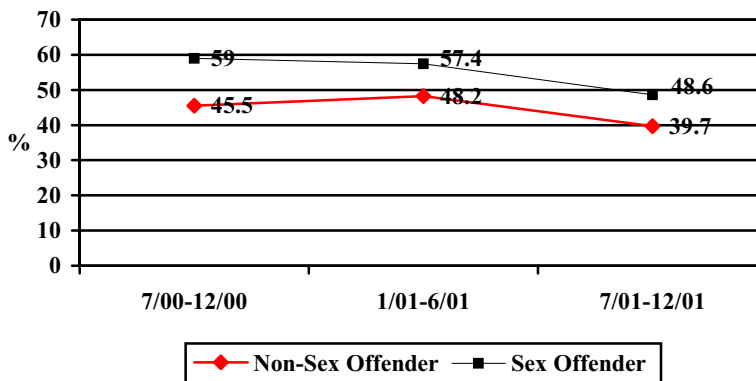


Figure 6: 12-Month Recidivism by Cohort and Sex Offender Status (N=3,037)



To confirm the bivariate relationships reported above, we conducted a multivariate logistic regression (collapsing across cohorts) to assess the independent effects of these variables on the likelihood of being returned to custody within 12-months of release. The overall model was statistically significant ($-2 \text{ Log } L=3,949.5$, $\chi^2 [df=5]=73.9$, $p<.0001$). The results of this analysis are shown in Table 1.

Table 1: Results of Logistic Regression Predicting 12-Month Recidivism (N=2,954)

Predictor	Odds Ratio (OR)	p-value
Age	1.01	.06
African American (vs. all others)	0.86	.06
Mental Health Problems (CCCMS/EOP)	1.04	.67
Sex Offender (r-suffix)	1.18	.09
>90 Days in Aftercare	0.46	<.0001

Although three of the predictors in this model were marginally significant (age, African American, and Sex Offender status), only the 90-day aftercare variable exceeded the conventional p value of .05. In fact, even after controlling for the effects of the other four variables, participation in aftercare for at least 90 days was associated with a .54 reduction in the odds of being returned to custody within 12 months. This estimated reduction in risk differs from the 40% mentioned earlier because the former did not take into account other individual differences that were associated with recidivism risk. The 54% figure should be considered an “adjusted” estimate that controls for the other factors shown in Table 1.

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strategies to increase the likelihood that SATF-SAP parolees enter and remain in aftercare for at least 90 days.

Appendix A

Definitions of Statistical Procedures and Values

Chi-square: A chi-square analysis tests the independence of two categorical variables (e.g., gender x race/ethnic group). The higher the chi-square value, the stronger the relationship is between the two variables, although determining whether the value is statistically significant depends on the number of degrees of freedom in the model. For example, the critical value for a chi-square with 1 degree of freedom (at the .05 alpha level) is 3.84; for 2 degrees of freedom, the critical value would be 5.99.

Logistic Regression: Logistic regression applies maximum likelihood estimation after transforming the dependent variable into a logit variable (the natural log of the odds of the dependent occurring or not). In this way, logistic regression estimates the probability of a certain event occurring (e.g., whether the parolee was returned to custody). Note that logistic regression calculates changes in the log odds of the dependent, not changes in the dependent itself as OLS regression does. Significant odds ratios greater than 1 indicate that the independent variable is associated with an increased likelihood of falling in the specified category of interest (e.g., recidivism).

Significance (p value): Statistical significance is related to the probability that the observed differences between groups are not the result of chance. A significance level (alpha) of .05, for example, indicates that there is a 95% chance that the observed differences did *not* occur by chance.