Alcohol and Drug Services Research Institute

Department of Alcohol and Drug Services, Santa Clara Valley Health and Hospital System, Santa Clara County
and

Speiglman Norris Associates

Assessment of Santa Clara County SACPA Client Outcomes

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Deane Wiley, Acting Director, ADSRI, served as Project Manager and guided the execution of the study. Hung Nguyen of ADSRI prepared the data, which were then further developed by Speiglman Norris Associates. Martha Beattie, former Director of ADSRI, also participated in the project. ADSRI is located at 976 Lenzen Avenue, San Jose, California 95126. Dr. Wiley can be contacted at Deane.Wiley@hhs.co.scl.ca.us.

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Executive Summary

Background

Proposition 36, the Substance Abuse Crime Prevention Act, passed in November 2000, mandates that adults in California convicted of possession or use of illegal drugs be offered substance abuse treatment in lieu of incarceration. A large number of adults arrested for drug use are thereby directed into community-based treatment. Using secondary data, this report examines outcomes for Santa Clara County SACPA clients in the period following treatment completion. This is accomplished by comparing how client statuses compare from one year prior to SACPA treatment entry to one year after discharge from treatment.

In Santa Clara County, the County Executive's Office, the lead agency for SACPA implementation, convened a Steering Committee to plan the implementation of the program. Determination of SACPA eligibility is made by Santa Clara County's District Attorney's office. If upon arraignment the offender pleads guilty to the offense, a conviction is recorded; otherwise, a trial is scheduled. Less than one percent of those pleading or found guilty refuse treatment and receive traditional sentencing. Understanding that pre-sentence assessments give judges the maximum amount of information on which to base sentencing, those convicted are, before sentencing, referred for assessment by both the County Department of Probation and the County Department of Alcohol and Drug Services (DADS). Assessments took place in custody for almost half of SACPA-eligible offenders during the first year of operation, upon which this study is based. Once assessed, offenders are sentenced, placed under probation supervision and referred for treatment. Three-quarters of the offenders referred from the courts receive treatment in the DADS treatment system. About ten percent are referred for private treatment or to another county; the remaining fifteen percent either were not matched between court and treatment databases, or, in violation of the judge's order, do not connect with treatment at all. About 15% of the most needy clients receive residential treatment followed by outpatient services after stabilization, while over half start in outpatient treatment. Smaller proportions are referred to case management or psychoeducational services.

Method

The study defines a 9-month selection window for new SACPA client treatment authorizations, from October 1, 2001, through June 30, 2002 (N = 1190). Data included information on client demographic characteristics; alcohol and drug use; criminal justice status; utilization of health, mental health, and alcohol and drug treatment services; and receipt of social welfare benefits. Data were generated from databases compiled or administered by the Santa Clara County Department of Alcohol and Drug Services (DADS), Department of Mental Health, Health and Hospital System, Criminal Justice Information Control (CJIC), and Social Services Agency.

Whenever data from more than one information system are used, there will be some cases for which no match is found when it should be. For SACPA clients in the DADS

treatment system, it is clear that 100% of them should have been matched to the criminal justice information system. However we experienced an imperfect match: ten percent of the cases were not matched at all, and it is possible that some "matches" were mis-matched due to wrong identifying information in one or both systems. There is no reason to believe that the non-matches differed from the matches, however. Hence, findings and conclusions would not be expected to differ substantially if 100% complete and accurate matches had been made.

Findings

As findings from this study are presented, comparison to DADS clients prior to SACPA implementation is made when applicable. The references are to an earlier report, **Outcome Evaluation of DADS Services using Performance Measures from Secondary Data**, which covered fiscal year 1997-1998 to 2000-2001 DADS clients and is available at www.sccdads.org, Evaluation and Research Reports.[1]

Clients Average Two Weeks between Assessment and Treatment

- Eight percent of the clients had already been in treatment before the first assessment in the selection window (for a median length of time of 1.6 months). This "early treatment" may document the fact that some DADS clients were arrested and/or pled guilty to a SACPA offense while already in treatment, or in some cases may reflect the advice of pre-trial services staff that to gain a more lenient sentence offenders initiate treatment on their own to show "good intent" when they come before the judge. Other cases may represent client acknowledgement that treatment was appropriate prior to conviction or referral for assessment.
- For the remaining cases, the median length of time between assessment and first treatment episode was 15 days. The median is representative of the "typical" client since equal numbers of clients began treatment in less than that time and in a longer period of time.

Clients Stay in Treatment over 90 Days

- The median length of time in treatment is 3.4 months.
- The range of time in treatment - from 0 months to 10 months - suggests great variety probably in both the clinical and the legal arenas affecting treatment.

More SACPA Clients Return to Treatment than did DADS Clients Prior to SACPA

Relapse is defined as a return to the substance abuse treatment system, within one year of discharge, at a higher level of use (higher frequency), or at a higher level of care. A maintenance return is defined as a return to treatment, within one year of discharge, with

[1] There are two limitations to hold in mind when comparing results of the previous DADS outcomes analysis with these SACPA outcomes findings. First, the time period covered in the previous ADSRI study (cohorts entering treatment in fiscal years 1997 through 2000) is not equivalent to that for this set of analyses (individuals assessed for treatment between October 2001 and June 2002). A number of changes were made in the DADS system to implement SACPA, and both the distinctions in time period and introduction of program changes may contribute to different experiences for the two treatment cohorts. Thus, apparent differences between DADS and SACPA clients might be exaggerated.

a level of use and level of care no greater than the previous use. Overall, 39% of the sample had at least one return to treatment.

- Within one year of discharge, the initial return to treatment for 18% of the study population was because they experienced a relapse.
- Within one year of discharge, the initial return to treatment for 21% of the population was a maintenance return to treatment.
- Both relapse and maintenance returns for SACPA clients are more than double the rates for clients served by DADS prior to SACPA implementation. Some of this difference may be the result of closer scrutiny of the SACPA population, all members of which are under the close supervision of the court and, for some offenders, more intensive probation supervision than was utilized prior to SACPA. Also since maintenance return is defined as a return to treatment, within one year of discharge, with a level of use and level of care no greater than the previous use, this can indicate a positive decision to return before a relapse takes place.

Drug-Related Re-Arrests and Re-Arrest Rates Decline Significantly following Treatment

- Most (59%) SACPA clients committed at least one drug-related crime in the year prior to SACPA treatment entry that resulted in an arrest. This figure is not the expected 100% arrested for several reasons:
    - offenses culminating in a SACPA conviction may have occurred over a year earlier due to criminal justice delays in arrests, criminal filings, and convictions;
    - the amount of time between assessment and treatment entry was sometimes quite lengthy; and
    - only 90% of the treatment clients were matched with criminal justice data due to non-matching identifying information in the two databases.
- During the treatment period, 5% of clients are reported to have at least one offense resulting in a new, drug-related arrest. Recall that the treatment period is only 3.4 months and thus a lower number would be expected.
- In the year after treatment 22% experience such an arrest.
- The rate of new, drug-related misdemeanor or felony arrests declines from .78 per person before to .06 during and then increases to .27 after treatment. The rate refers to the total number of arrests per person occurring during those time periods.
- Similar findings are evident for drug-related *convictions* for new offenses occurring during those periods.
- The entire DADS treatment population in the years before the implementation of SACPA also shows high rates of arrests and convictions. In Fiscal Year 2000, the year before SACPA was introduced, 44% of clients had one or more arrests in the year before treatment, and this dropped to 19% in the year after treatment. Interestingly, the proportion arrested during treatment, 5%, is identical to the proportion of SACPA clients arrested during the SACPA treatment period.

Time in Jail for Drug-Related Offenses Is Greatly Reduced following Treatment

Prevalence and rate of jail time for drug-related misdemeanor and felony offenses closely track findings for arrests and convictions.

- 56% of SACPA clients have some drug-related jail time in Santa Clara County in the one-year period prior to treatment.
- Prevalence of jail time declines to 4% in the shorter during-treatment period.
- Prevalence is 20% in the year after treatment.
- The mean number of jail days drops from 24 to 12 days from the year before to the year after treatment.

The Presumed High Risk for New Drug-Related Arrests and Jail Days between Assessment and Treatment Entry Is Confirmed

There is much concern about the situation for the many clients who cannot or do not enter treatment immediately following their assessment, and therefore may experience a magnified chance to re-offend. The presumption is that the period between assessment and initiation of treatment is a time during which future treatment clients are at high risk for the commission of new crimes, in particular drug-related offenses.

- Seven percent of clients re-offend during the period between assessment and treatment entry, resulting in arrests in the median one-half month between assessment and treatment.
- The findings on arrest *rates* and jail days support the same interpretation: indicators suggest that substantial criminal justice activity takes place between assessment and treatment.
- The prevalence and rate of arrests and jail days between assessment and treatment are similar to those during the much longer in-treatment period which averages 3.4 months. Since the median during-treatment time period is approximately seven times the median length of time between assessment and treatment, it follows that the chances of re-offending are heightened during this vulnerable, pre-treatment period.
- In order to interpret this finding arrest prevalence and rates are calculated *per month* for the various time periods to make them comparable.
    - The proportion of clients with drug-related arrests per month is 4.9% in the year prior to treatment, 1.5% during treatment, 1.9% in the year after treatment, but a surprising 8.2% between assessment and treatment.
    - The rate, i.e., number of arrests per client on a monthly basis, is .06 prior to treatment, .02 during treatment, .02 after treatment, but a very high .10 between assessment and treatment.

Receipt of Public Benefits Increases Slightly from Before to After Treatment

Four forms of public benefits were examined. CalWORKs and General Assistance provide cash, and Food Stamps a quasi-cash form of assistance for impoverished persons. Medi-Cal constitutes a health insurance program for poor Californians.

Three important considerations need to be noted. First, initial treatment success may result in increased utilization of public benefits. Whether because of abuse of alcohol or other drugs, lack of information, or personal or familial disorganization, many individuals presumptively eligible for benefits either do not acquire them or lose them because of failure to comply with paperwork and other requirements. Second, even for those finding work, low wages from entry-level jobs may not eliminate eligibility for means-tested

benefits, such as Food Stamps or cash assistance. Hence, even as treatment proves successful and employment is secured, benefit rates may increase rather than decrease. Third, all four indicators are sensitive to larger economic trends and to changes in program rules, such as time limits for receipt of CalWORKs and Food Stamps. Limited to these administrative data, it is difficult to define what a successful outcome would be in a relatively short-term follow-up.

- CalWORKs benefits were provided to 3% of SACPA treatment clients in the year prior to treatment and to 3% in the year following treatment.
- Food Stamps were provided to 5% of clients in the year before treatment and to 8% following treatment discharge.
- The prevalence of General Assistance receipt increased from 3% before treatment to 6% in the after-treatment year.
- Receipt of Medi-Cal eligibility was unchanged at 7% in the year prior to treatment and the year following treatment.
- SACPA clients are more likely to receive General Assistance than DADS clients prior to SACPA. For the remaining public benefits, SACPA clients start off at lower utilization than clients prior to SACPA and over the study period increase utilization. The increase may be evidence of greater improvement for SACPA clients, who demonstrate greater access to and/or use of these benefits.

Use of Mental Health Services, an Indicator of Psychological Distress or Serious Mental Disorder, Is Virtually Unchanged from the Year Before to the Year after Treatment

A useful, though imperfect, measure of well-being is receipt of county mental health services. In a general sense, one can infer positive mental health among SACPA clients by lack of contact with the mental health system. On the other hand, for persons who had not been receiving services that were needed, we might infer that mental health would improve if regular engagement with the mental health system were initiated or resumed.

- The prevalence of receipt of mental health services was 13% in the year prior to SACPA treatment and 12% in the year following treatment, virtually unchanged.
- SACPA clients display less service use than previous DADS clients.

Use of Emergency Room Services Declines following Treatment, while Outpatient Utilization Increases

Improved physical health is often an objective of treatment services. Lack of hospitalizations and emergency room visits provide an indirect, if imperfect, measure of physical health. While outpatient visits may indicate ill-health they may also reflect appropriate use of preventive and routine medical care. Thus, although we would expect reduced numbers of emergency room visits, and perhaps hospital stays, following substance abuse treatment, outpatient service utilization might increase as former clients integrate routine and preventive care into their lives.

- Prevalence of emergency room visits declined slightly from 16% in the year prior to treatment to 15% in the year following treatment.
- Rate of emergency room visits parallels prevalence, changing slightly from 0.26 per person per year pre-treatment to 0.24 following treatment.

- Prevalence and rate of emergency room visits *during* treatment is surprisingly large – 8% of clients and 0.10 visits per person – given that median length of treatment is only 3.4 months.
- Both prevalence (3% before, 4% after) and rate (0.04 before, 0.05 after) for inpatient care are generally low, showing a modest increase after treatment.
- In the year before treatment, 20% of SACPA clients used outpatient services at Valley Medical Center ambulatory care sites. Prevalence declined to 13% during the 3.4 month treatment period and increased to 24% in the year following treatment.
- Before- to after-treatment rates show an even bigger increase, rising from 0.31 visits per person-year before treatment to 0.68 visits per person-year following treatment.
- SACPA clients utilize hospital, emergency room, and outpatient services less than did DADS clients prior to SACPA. However while use of outpatient services remained unchanged for clients prior to SACPA, there was an increase in utilization following treatment for SACPA. This may indicate that some clients have integrated routine care into their lives.

Overall Crime Decreases following Treatment

The policy assumption of SACPA is that treatment for substance abuse will reduce crime significantly, with an impact not only on drug-related offenses but also on other charges that may be associated with substance abuse. Violent offenses and property crimes, for example, may be part of a life pattern involving substance abuse. Therefore, we report on prevalence and rate for all new misdemeanor and felony arrests, convictions associated with those arrests, and associated jail days, whether drug- or non-drug-related. Generally, the patterns in the figures that follow resemble those for drug-only arrests, convictions, and jail days, though on a larger scale.

- The prevalence of total new arrests declines from 75% in the year before treatment to 43% after treatment.
- Arrest rates follow, declining from 1.39 per person in the year before treatment to 0.69 per person in the year following treatment.
- The prevalence of convictions for new arrests declines from 66% for the before-treatment period to 35% following treatment.
- Rate of conviction drops from 3.3 per person in the year before treatment to 1.8 per person in the year following treatment.
- Proportion of clients with days in jail for any misdemeanor or felony drops from 71% in the year before treatment entry to 36% in the year following treatment.
- In the same periods rate of jail days drops from 38 jail days per person in the year before treatment to 26 days per person in the year post-treatment.
- Changes in legal difficulties overall are quite similar when comparing SACPA clients to DADS clients in previous years, but on each measure more positive change is evident for DADS clients, compared to the SACPA population.

Policy Implications

Together, the data on arrests, convictions, and jail days suggest that treatment serves to decrease risk for arrest and conviction - and probably engagement in - criminal behavior, both that involving drugs and other criminal activity. The major finding is that treatment works, as intended in policy, and works at least as well for SACPA clients as for DADS clients in general. The treatment period is associated with fewer arrests, convictions, and jail days than would otherwise be expected. Use of expensive and possibly unnecessary emergency services decreases, and outpatient utilization increases, probably due to education received during treatment.

The finding that criminal activity decreases following treatment is especially salient in light of the relatively poor results for SACPA clients in the brief period after assessment and before entry into treatment. Thus, we would suggest, efforts should be continued to focus on providing for more rapid entry to treatment.

Limitations on interpretation of SACPA findings.

There are three factors limiting interpretation of these findings that we wish to note. First, as mentioned above, we experienced an imperfect match between DADS and CJIC databases. Ten percent of the cases were not matched at all, and it is possible that some "matches" were mis-matched due to wrong identifying information in one or both systems.

Second, we rely on administrative data that were not collected for the purpose of monitoring the outcomes examined in this study. There are problems with both over- and under-counting. As an example of under-counting, as a measure of relapse *returns to substance abuse treatment* misses both individuals experiencing a relapse who do not return to treatment and those who, having relapsed, secure treatment outside the DADS system. There are similar limitations with the mental health, emergency room, outpatient services, and hospital data. Arrests, convictions, and jail days are also imperfect measures, given their reliance on observation and action by the criminal justice system and a catchment area that does not extend beyond the County's borders. Much of the problem is presumed inconsequential, however, insofar as the same limitations apply to all time periods of interest. An important exception is discussed below. Hence, while few of the health, hospital, and criminal justice figures can be taken to represent absolute prevalence or rate of services utilization, or need for services, comparisons of prevalence and rate across time remain useful.

Extreme caution must be used in interpreting one aspect of the criminal justice measures. There is not a one-to-one relationship between acts of criminality and arrests or convictions for those acts. Most crime goes unreported and undiscovered, and, among crimes discovered, many result in no arrest and/or no conviction. By definition, all members of the SACPA client group had, relatively recently, experienced at least one arrest and conviction that resulted in a SACPA sentence. Hence, we would expect a decrease in the percent of SACPA clients experiencing arrest, conviction, and jail days, even if nothing changed in the individual client's drug behavior during or after treatment. However, while many SACPA clients may have been under the watchful eye of Court

and/or Probation during much of the year *prior* to assessment, all were watched in the *following year*. As a result we would expect to see violations of probation and re-arrests due to the involvement of Court/Probation, as stipulated by the Act.

SACPA Client Outcomes Study

1. Background

In recent years there has been an intensification of the policy debate over how United States society should respond to users of illicit psychoactive drugs. One of the most closely watched and potentially influential developments has been the implementation of Proposition 36, the Substance Abuse and Crime Prevention Act (SACPA), which passed in November 2000. This ballot initiative mandates that adults in California convicted of possession or use of illegal drugs be offered substance abuse treatment in lieu of incarceration. A large number of adults arrested for drug use are being directed into community-based treatment, probably surpassing the number of persons entering treatment through drug court. Counties have considerable discretion in how they structure their systems of care and client management procedures for handling SACPA clients.

The stated intent of the drafters of the initiative is to provide treatment as an alternative to prison, and to address substance abuse as a matter of public health rather than criminal justice.[2] Counties confront delicate questions of how to prioritize limited funding for this on-going program. While implementation studies have been completed or initiated at the Public Health Institute, RAND and UCLA, no outcome study results are anticipated in the near future.

Though not providing outcome results, findings from a study by Hser and colleagues[3] is of interest for its description of the SACPA treatment population in their five-county evaluation. Compared with non-SACPA clients, the authors write, SACPA patients are "more likely to be men, first-time admissions, treated in outpatient drug-free programs, employed full-time, and users of methamphetamine or marijuana" (p. 479). Longshore and colleagues[4], evaluating SACPA implementation statewide, report similar findings concerning gender, first-time admissions, treatment modality, and the primacy of methamphetamine.

With the approaching deadline for re-funding SACPA, it is appropriate to examine the efficacy of SACPA procedures and treatments as data become available. Process measures and outcomes of interest should include treatment completion versus dropout,

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[2] Marlowe et al. term Proposition 36 post-adjudication "low-intensity, non-judicially managed diversionary intervention" (p. 216). Marlowe, D.B., Elwork, A., Festinger, D.S., and McLellan, T. (2003). "Drug policy by popular referendum: This, too, shall pass". Journal of Substance Abuse Treatment, 25(3): 213-221.

[3] Hser, Y-I., Teruya, C., Evans, E.A., Longshore, D., Grella, C., and Farabee, D. (2003). "Treating drug-abusing offenders. Initial findings from a five-county study on the impact of California's Proposition 36 on the treatment system and patient outcomes". Evaluation Review, 27(5): 479-505.

[4] Longshore, D., Evans, E., Urada, D., Teruya, C., Hardy, M., Hser, Y-I., Prendertgast, M., and Ettner, S. (2003). "Evaluation of the Substance Abuse and Crime Prevention Act 2002". Report. "Implementation: July 1, 2001 to June 30, 2002". Los Angeles: Integrated Substance Abuse Programs, UCLA, July 7.

treatment attendance, drug use, and criminal recidivism.[5] Drug courts provide one important standard against which to evaluate the success of other programs.

McLellan discusses the value of effective substance abuse treatment, which is associated with clients' amenability to treatment, motivation, and readiness for change. More or less judicial involvement – respectively, drug court versus SACPA procedures, for example – would be expected to have different outcomes.[6]

The large vote for SACPA signifies major shifts in United States substance abuse policy. Its passage, as well as other states' subsequent consideration of drug policy reform, has been seen as weakening law enforcement hegemony in policy toward drug users; as demonstrating an end to tolerance for the large numbers of government dollars spent on prisons; as heralding public acceptance of addiction as an illness deserving treatment; and as expressing public acceptance of a harm reduction approach and perhaps partial legalization. The Proposition has attracted widespread interest. Study findings should promote local programmatic decision-making, State funding decisions, and development of policy nationally.

Considerable literature on drug courts points to their benefit in reducing recidivism and jail time, promoting recovery, and other positive outcomes.[7] But many drug court evaluation studies are constrained by their limited view of "outcome". Typically, they measure only what takes place while the client remains in drug court and in treatment. However, drug court and treatment provide unusual conditions both personally and socially. It is rare to see similar structured activities and comprehensive supports built into post-treatment life. Hence it is important, as the Alcohol and Drug Services Research Institute *(*ADSRI) has done, explicitly to move beyond this limited time frame to examine outcomes in the period following treatment completion. ADSRI's findings, through analysis of secondary data, suggest successful client outcomes resulting from the use of County substance abuse treatment services overall.[8]

Below we summarize SACPA client outcome project goals; review the methods used, including a review of project data, data preparation and data analysis; present findings; compare findings with the previous ADSRI study; and briefly discuss policy implications; study limitations; and next steps.

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[5] Marlowe et al. (2003).

[6] McLellan, A.T. (2003). "Crime and punishment and treatment: Latest findings in the treatment of drug-related offenders". Journal of Substance Abuse Treatment, 25(3): 187-188.

[7] SACPA and drug court experiences may differ in three general domains: clients, court and related criminal-legal operations, and treatment requirements. Substantial differences in any one or more of these areas would be expected to yield potentially significant differences in outcome results. As Wolf notes, "Santa Clara County strongly believes in its drug court model and has attempted to enroll some of its SACPA clients in court/treatment models as close to the drug court model as legally possible." Wolf, M.J.P. (2004). Comparing Drug Court and the Substance Abuse and Crime Prevention Act (SACPA) in California. Thesis for Master of Public Policy degree, University of California, Berkeley.

[8] The ADSRI dataset includes outcomes for self-referred as well as court-mandated and other clients.

2. Project goals

The model for the SACPA study is an ADSRI examination of Department of Alcohol and Drug Services (DADS) client outcomes over the FY 1997 - 1998 – FY 2000 - 2001 period, reported in *"Outcome Evaluation of the Department of Alcohol and Drug Services Using Performance Indictors from Secondary Data"*[9] (hereinafter, the previous ADSRI study). In that study, ADSRI used several sources of administrative secondary data to monitor client outcomes and infer DADS program success.

- The primary project goal is to describe outcomes for SACPA clients in the first year of SACPA implementation (July 2001 – June 2002).

- The second goal is to compare SACPA client outcomes with those for the entire DADS population in the year prior to SACPA implementation by reporting similar evaluation data on selected client characteristics and outcomes.

- The third project goal is to assess the usefulness of various indicators and data on client characteristics for multivariate modeling, and to generate preliminary multivariate models intended to identify predictors of success for the treatment system. Progress on this goal will be reported in a subsequent report.

The primary and secondary research questions are:

- How do client outcomes compare before/during/after the SACPA client's treatment experience; that is, from one year prior to SACPA treatment entry, through the period of treatment, to one year after discharge from treatment?

- How does SACPA appear to be changing the characteristics of the DADS treatment population overall?

Given the goals and research question, the population of interest is SACPA clients of the Department of Alcohol and Drug Services, Santa Clara Valley Health and Hospital System.

In Santa Clara County, the County Executive's Office, the lead SACPA agency, convened a Steering Committee to plan the implementation of the program. Determination of SACPA eligibility is made by Santa Clara County's District Attorney's office. If upon arraignment the offender pleads guilty to the offense, a conviction is recorded; otherwise, a trial is scheduled. Less than one percent of those pleading or found guilty refuse treatment and receive traditional sentencing. Those convicted are, before sentencing, referred for assessment to both the Department of Probation and the Department of Alcohol and Drug Services (DADS). While most counties assess post-sentencing, the Steering Committee decided upon pre-sentence assessments in order to

[9] Alcohol and Drug Services Research Institute, July 24, 2003. Project Director: Martha C. Beattie, Ph.D.; Project Manager: Hung Nguyen, M.S. Available at http://www.sccdads.org/ under Evaluation and Research Reports.

give judges the maximum amount of information on which to base sentencing. Assessments took place in custody for almost half of SACPA-eligible offenders during the first year of operation. Once assessed, offenders are sentenced, placed under probation supervision and referred for treatment. Three-quarters of the offenders referred from the courts receive treatment in the DADS treatment system. About ten percent are referred for private treatment or to another county; the remaining fifteen percent either were not matched between court and treatment databases, or do not connect with treatment at all, in violation of the judge's order.[10] About 15% of the most needy clients receive residential treatment followed by outpatient services after stabilization; over half start in outpatient treatment. Smaller proportions are referred to case management or psychoeducational services.

3. Method

Evaluation window. While we were interested in the first year of SACPA's operation, it was agreed that we would ignore clients entering the system for assessment in the first three program months – July 1 through September 30, 2001. During that period, SACPA data systems were still being refined, and client flow seemed likely to differ from the second and subsequent program quarters once procedures had been fully developed and put in place. Also, it was felt, the case mix may have changed over time, such that early cases may have included a unique collection of individuals who had delayed justice system processing of their cases in order to benefit from SACPA sentencing options. By delaying the start date for the evaluation window we intended to choose cases typical of ongoing SACPA clientele and operations in order to provide an unbiased – and potentially most useful – basis for analysis of the program and policies. Additionally, cases in the analysis group were to have completed treatment in time to permit at least 12 months of follow-up. Hence cases closing treatment after December 31, 2002 (N = 202) were excluded from analyses. Thus, this study defines a 9-month selection window for new SACPA client treatment authorizations, beginning with October 1, 2001 and extending through June 30, 2002.

Evaluation subjects. In addition to the 202 cases whose case closed after December 31, 2002, we excluded from analyses several sets of clients with particular circumstances. Individuals with parole-only referrals (N = 96) were excluded, because they are monitored by State Parole agents, rather than County Courts and Probation. We also excluded individuals with very limited SACPA program involvement, such as no alcohol or drug treatment other than detoxification (N = 19), vocational services (N = 3), transitional housing (N = 32), or no treatment record at all (N = 1). Detoxification-only cases were excluded since no treatment process was initiated. Individuals whose only recorded services were transitional housing or vocational services were defined as not participating in formal substance abuse treatment programs. Additionally, methadone-

[10] Clients in the treatment system database were matched to SACPA offenders in the criminal justice system database using name, birthdate, gender, social security number, and if available in the treatment system data, the offender identifier in the criminal justice database. Ten percent of the cases could not be matched due to data discrepancies such as transposed numbers. It is not known if the 15% that are not accounted for were in violation of Court orders or simply could not be adequately matched.

maintenance-only cases (N = 7) were excluded as unlikely to complete treatment in an 18-month treatment period, the maximum length of stay permitted within the evaluation format. In total, 344 cases were excluded from analysis, some for more than one reason.

Project data. Data used for this project include information on client demographic characteristics; alcohol and drug use; criminal justice status; utilization of health, mental health, and alcohol and drug treatment services; and receipt of social welfare benefits. Data were generated from data bases compiled or administered by the Santa Clara County Department of Alcohol and Drug Services (DADS), Department of Mental Health, Health and Hospital System, Criminal Justice Information Control (CJIC), and Social Services Agency. Treatment records include information on participation in detoxification, outpatient, and residential alcohol and drug services; mental health services; and medical care episodes in the hospital emergency room, inpatient, and ambulatory clinic care. Criminal justice records include arrest, conviction, and jail incarceration data on drug-related and other offenses. Social services records provide information on receipt of public assistance and other benefits, including CalWORKs, General Assistance, Food Stamps, and Medi-Cal.

Data preparation. For comparability between this study and the previous work on DADS clients, ADSRI staff performed coding of arrests and convictions as "new" and "drug-related" or "non-drug-related", following the protocols used in the previous study. Likewise, ADSRI staff coded episodes associated with hospitalizations, emergency room use or outpatient medical or mental health care following similar or identical decision rules as used in the DADS report.

ADSRI matched information across data systems with data on individuals assessed by DADS for SACPA treatment referral. To accomplish this, ADSRI created unique identifiers recognized across data systems for each assessment client. ADSRI then selected individual cases meeting the SACPA study selection window criteria and identified relevant data within each individual's *before*, *during*, or *after* treatment periods. (Study time periods are further described below). In addition, to enable examination of client experience between assessment and before treatment, ADSRI selected relevant data falling within periods called *before* and *after assessment*. After ADSRI prepared the data, a file stripped of personal identifiers was provided to Speiglman Norris Associates (SNA), for further analysis and report preparation.

Human subjects review. Because all personal identifiers were stripped from the working data files provided to Speiglman Norris Associates, the Institutional Review Board of the Santa Clara County Public Health Department declared the project exempt from IRB review under federal regulations. Data from the multiple administrative data sources were linked by ADSRI staff using a random numeric identifier for each case, and SNA received data with only this fictitious case identifier.

Decision rules for identifying dates and defining before, during and after periods. Periods of interest include:

- Assessment Window for Study Selection. SACPA assessments taking place during the period from October 1, 2001 through June 30, 2002. The window was chosen to exclude the first SACPA cases (believed to be atypical of ongoing program client experience) and to limit study cases to those that could accrue one full year of follow-up after conclusion of treatment.

- Before Treatment. The 365 days before the first authorized treatment for SACPA clients assessed within the selection window.

- During Treatment. Period of time from admission to the first treatment episode under the authorization referenced above until discharge date for the last treatment episode under the same treatment authorization. This definition allows tracking of treatment through the full continuum of care that a client might receive in one period of time.

- After Treatment. The 365 days or, in the case of hospital data, six months, following treatment discharge under the same treatment authorization.

- Before Assessment. The 365 days before first SACPA assessment (clients could have engaged in more than one assessment during the research period).

- Between Assessment and Treatment. Period of time from the index assessment to the first subsequent treatment.

Here it is noted that hospital data are available through June 2003, while DADS, mental health, and social services data continue through December 2003. Criminal justice data of interest are through December 2003, although records through February 2004 are used to update information concerning convictions for arrests that took place during the applicable period through December 2003.

Following the logic of the previous ADSRI report, for each outcome variable of interest, we report bivariate analyses (cross-tabulations and comparisons of means), comparing client outcomes before, during, and after SACPA-initiated treatment. For criminal justice experiences, we add analyses examining occurrences between SACPA-initiated assessment and the beginning of treatment.

4. Findings

After we describe basic demographics of the study population below, we present findings on length of time between assessment and treatment and on length of stay in treatment, followed by findings on outcomes in the five areas of interest: reduction in or elimination of abusive use of alcohol and other drugs, care for oneself financially, positive sense of well-being, lack of psychological distress, physical health, and overall crime.

Population description. The DADS SACPA client population, as defined for this study, consists of 1190 individuals meeting the study selection criteria. Table 1 displays data on gender, race/ethnicity, marital status, education, and preferred language. Three-quarters (75.2%) of the population is male. Most (62.2%) of the population reports never having

been married. Although the group is racially heterogeneous, together, Latino/Hispanics and Non-Latino Whites comprise 81.9% of the group, with Blacks/African Americans accounting for another 8.4%. Mean years of education is 11.4; median, 12. Almost all members of the group (89.9%) report English as their preferred language, with 7.6% selecting Spanish.

In comparison, the treatment population in the year prior to SACPA's introduction was somewhat less likely to be male (67%), but on other demographic characteristics it is quite similar.

Table 1. Demographics

	Frequency	Percent
Gender		
Female	295	24.8
Male	895	75.2
Total	1190	100.0
Marital status		
Never married	740	62.2
Now married	149	12.5
Divorced/separated/widowed	290	24.4
Unknown	11	.9
Total	1190	100.0
Race/ethnicity		
Latino/Hispanic	544	45.7
Non-Latino White	431	36.2
Black/African American	100	8.4
Asian/Pacific Islander	76	6.4
Native American	20	1.7
Other	19	1.6
Total	1190	100.0
Education		
Mean	11.4 years	
Median	12.0 years	
Preferred language		
English	1070	89.9
Spanish	91	7.6
Asian/Indo-Chinese	14	1.2
Other/unknown	15	1.3
Total	1190	100.0

Time between assessment and treatment and length of time in treatment.

Period between Assessment and Treatment. Relevant date information is available for 1189 of the 1190 cases of interest. In 96 cases the client had already been in treatment before the first assessment in the selection window (median length of time 1.55 months).[11] This "early treatment" behavior may document the fact that some DADS clients were arrested and/or pled guilty to a SACPA offense while already in treatment, or may reflect the advice of pre-trial services staff that to gain a more lenient sentence offenders initiate treatment on their own to show "good intent" when they come before the judge, or may represent client acknowledgement that treatment was appropriate prior to conviction or referral for assessment. For the remaining 1093 cases, median length of time between assessment and first treatment episode was .5 months (see Table 2). Lapse of time until treatment entry ranged from less than one day to 9.3 months.[12] However, 76.9% of cases were in treatment within one month of assessment and 91.5% were in treatment within two months (see Figure 1). (To increase readability of the graph, values greater than 4 are collapsed and displayed as equal to 4.) The longer lapses may reflect cases in which clients waited for a treatment opening; clients had scheduling difficulties, including work or family responsibilities; clients experienced additional criminal justice or other difficulties; or clients simply delayed action.

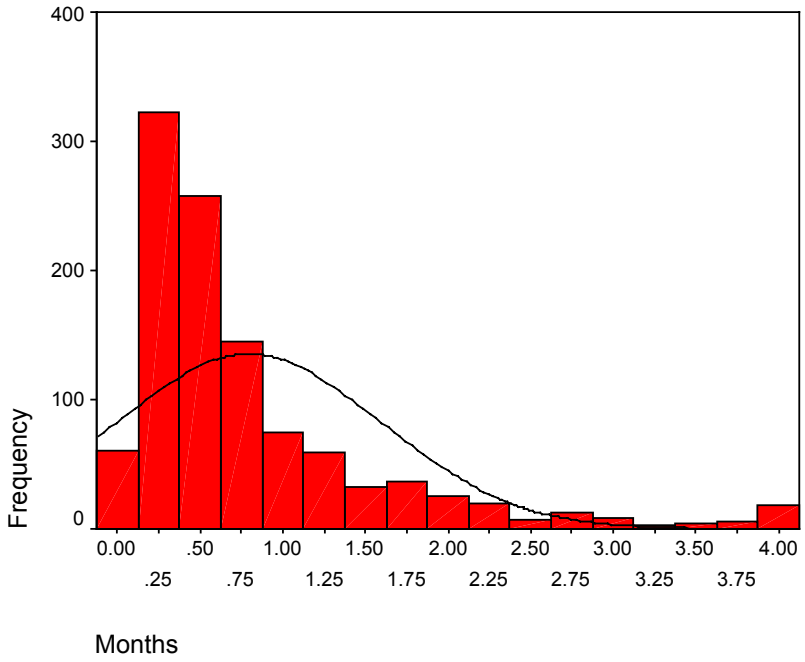
Table 2. Lapse of Time from Assessment to Treatment (months)

N	1093
Mean	0.82
Median	0.50
Minimum	0
Maximum	9.33

[11] For these cases, the start of treatment marked the SACPA treatment start even though the assessment as a SACPA client came later.

[12] This finding conflicts with that reported in Longshore et al. (2003). Their report that for 40% of counties time from assessment to treatment entry ranged from 1 to 30 days may reflect the point mentioned above that most counties implement assessment post-sentencing.

Figure 1. Time between Assessment and Treatment (values greater than 4 displayed = 4.0)



During Treatment Period. Table 3 provides summary statistics for the period of time from first treatment contact under the SACPA authorization until discharge date, operationalized as the last treatment contact under the same authorization. As is evident, while mean and median length of time in treatment are each about 3.5 months, the range of time in treatment – from 0 months (6.8% of cases with less than one full day in treatment) to 10 months or more (2% of cases) – suggests great variety probably both in the clinical and the legal role played by treatment.[13]

[13] If we distinguish between persons whose treatment followed an assessment *within* the study selection window, from those whose treatment began *before* the selection window, we find noteworthy differences. For cases in which treatment entry followed assessment (N = 1093), median length of time in treatment is 3.3 months. For cases in which treatment entry preceded assessment (N = 96), median length of time in treatment is 4.8 months. Recall that the selection window avoided the earliest SACPA clients because their characteristics, or course through SACPA, were thought likely to differ from later clients. Although the number of persons with treatment beginning before the study selection window is small, their longer duration of treatment suggests that their SACPA experiences may indeed differ.

Table 3. Time spent in treatment episode under same authorization

N	1189
Mean	3.56
Median	3.43
Minimum	0
Maximum	22.80

Outcomes.

For SACPA there is a question as to whether the primary objective is a criminal justice goal – reduction in criminal activity – or a treatment goal – reduction in or elimination of abusive substance use.[14] Both contribute to the public good.

Viewed more broadly, positive outcomes can be hypothesized in a number of additional areas, including mental health and ability to care for oneself physically and financially. For each indicator used, both the percentage of clients involved and, when applicable, the rate of use (or utilization) is provided.

4a. Reduction in or elimination of abusive use of alcohol and other drugs

Returns to the substance abuse treatment system after a relapse and new drug-related arrests, convictions, and days in jail constitute useful if imperfect measures of achievement, or lack of achievement, of reduction or elimination of substance abuse as well as reduction in criminal activity

Return to treatment measures. *Relapse* is defined as a return to the substance abuse treatment system, within one year of discharge, at a higher level of use (higher frequency), or at a higher level of care.[15] A return to treatment is coded as a higher level of care in the case of an individual who had been in aftercare or psycho-education, for example, and returned for outpatient drug-free services. A return from one of the mid-level treatment types to detoxification or residential services would also be considered a return to a higher level of care (see Table 4). On the other hand, a *maintenance return* is defined as a return to treatment, within one year of discharge, with a level of use and level of care no greater than the previous use. This can indicate a positive decision to

[14] See Speiglman, R., Klein, D., Miller, R., and Noble, A. (2003). "Early implementation of Proposition 36: criminal justice and treatment system issues in eight counties". Journal of Psychoactive Drugs, SARC Supplement No. 1; Klein, D., Miller, R.E., Noble, A. and Speiglman, R. (forthcoming). "Incorporating a Public Health Approach in Drug Law: Lessons from Local Expansion of Treatment Capacity and Access under California's Proposition 36". Milbank Quarterly); and Noble, A., Klein, D., and Speiglman, R. (2004). "After the Shotgun Wedding: Criminal Justice and Treatment Collaborations under California's Proposition 36 Drug Policy Reform", Oakland: Public Health Institute.

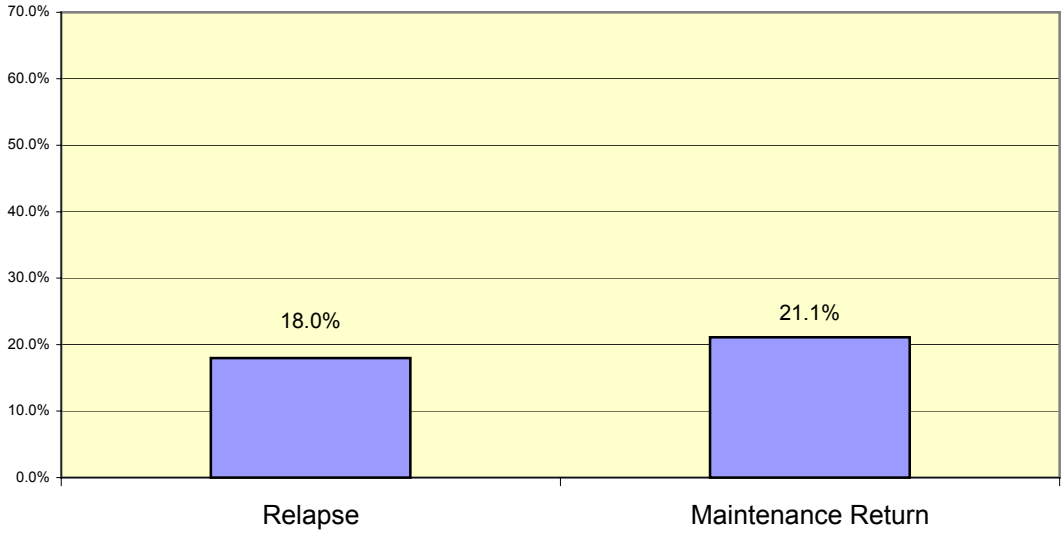
[15] See Shepard, DS, Daley, M, Ritter, GA, Hodgkin, D, and Beinecke, RH. (2002) "Managed care and the quality of substance abuse treatment". The Journal of Mental Health Policy and Economics 5 (4):163-174.

return before a relapse takes place. Figure 2 depicts those outcomes: as measured by the first return to treatment in the DADS system. Within one year of discharge, 18.0% of the study population experienced a relapse, while 21.1% recorded a maintenance return to treatment.

Table 4. Levels of Care

Level of care	Treatment Modality
1	Detoxification
	Residential
2	Case management
	Intensive outpatient
	Motivational enhancement
	Outpatient drug-free
	Transitional housing
	Psychiatric services
3	Aftercare
	Psycho-education

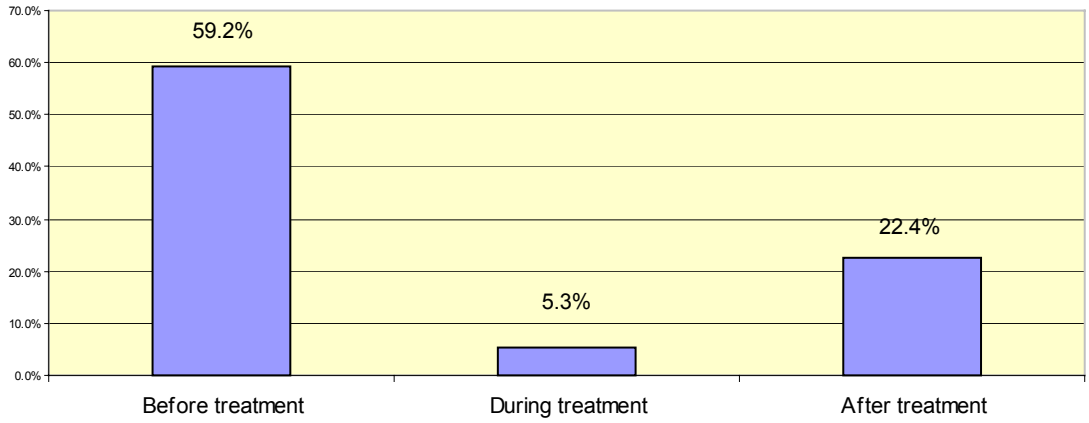
Figure 2. Returns to Treatment



Drug-related arrests and convictions for offenses before, during, and after treatment. Results in this section, as in most of the remainder of the report, are presented for three time periods, comparing experiences before, during and after treatment (see definitions in preceding section). Figures 3 and 4 display a comparison of new, alleged, *drug-related* misdemeanor or felony arrests in the year before SACPA treatment, the period during SACPA treatment, and the year after SACPA treatment. Figures 5 and 6 do so for convictions for those same offenses, in other words the convictions may occur later than the time period in question but the violation for which the conviction was made occurred during the designated time period. Figures 3 and 5 compare the *proportions* of unduplicated SACPA clients with new, alleged arrests and convictions for those offenses; Figures 4 and 6, the arrest and conviction *rates*.[16]

The prevalence and rate figures provide somewhat different measures of success (or failure). Santa Clara County criminal justice records indicate that 59.2% of SACPA clients experienced a drug-related arrest in the year prior to SACPA treatment entry. During the treatment period (median time in treatment 3.3 months for those entering treatment following assessment, 4.8 months for those entering treatment prior to assessment), 5.3% of clients are reported to have an arrest for a new, drug-related offense, and in the year after treatment 22.4% experience such an arrest. As one would expect, during the three periods of interest, the rate of new, drug-related misdemeanor or felony arrests follows a similar path, declining from .78 before to .06 during and then increasing again to a fraction of the pre-treatment rate to .27 after treatment.

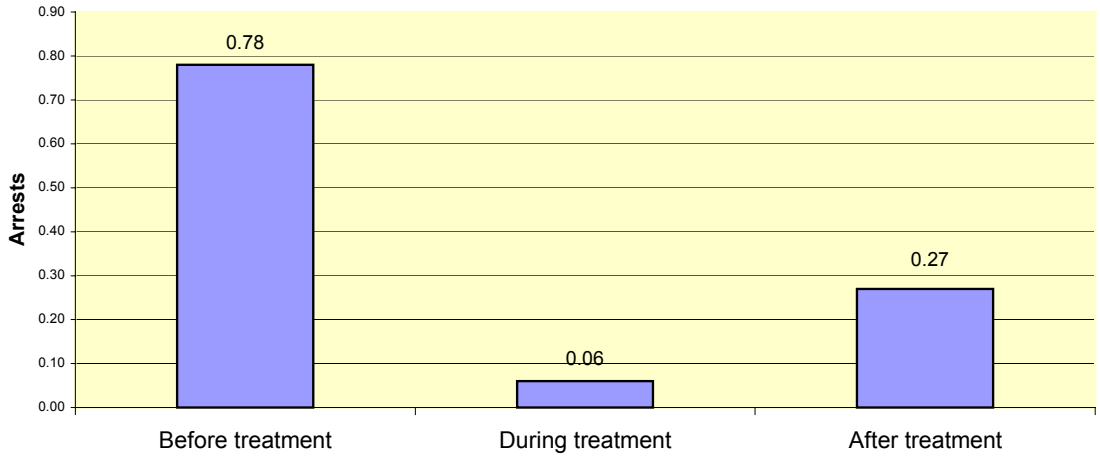
Figure 3. Percent of Clients with New Misdemeanor/Felony Drug-related Arrests Before, During, and After Treatment



[16] We refer to these as "arrests," since in so many of the cases an arrest takes place the day of the reported violation. However, not all arrests take place in such close proximity to the date of the alleged offense, or violation. It is actually the date of the violation resulting in arrest, not the date of the arrest, that is used to place an arrest within one of the time periods used.

The 59.2% figure for before treatment drug-related arrests is surprising. Certainly, before a SACPA conviction, all SACPA treatment clients should share the criminal history "fact" of having experienced an arrest for at least one SACPA offense. In fact, since our definition of "drug-related" arrest is broader than the set of offenses defined by law as SACPA offenses (for example, drug sales are drug-related but are not SACPA offenses), arrest *rate* findings depicted in Figure 4 could and might be expected to surpass 1.0.

Figure 4. Arrest Rate for New Misdemeanor/Felony Drug-related Offenses Before, During and After Treatment



However, given criminal justice delays in arrests, criminal filings, and convictions and delays resulting from defense motions, it appears that some offenses, arrests, and convictions may have been taken place prior to the one-year period before treatment entry. Some of this delay may accumulate from the time between assessment and treatment entry. Finally, administrative data mismatch between treatment clients and criminal justice participants explains some of the difference between 59.2 and the expected 100 percent since 10% of the clients could not be matched to their criminal justice data.[17]

Similar findings are evident for drug-related convictions for new offenses. With conviction defined as a finding of guilt resulting from the arrest examined, by definition conviction prevalence and rate must be no greater than corresponding arrest prevalence and rate.

[17] In this regard, it should be noted, *conviction* prevalence and rate may be further under-counted due to procedural delays.

Figure 5. Percent of Clients with New Misdemeanor/Felony Drug-Related Convictions for Arrests Before, During, and After Treatment

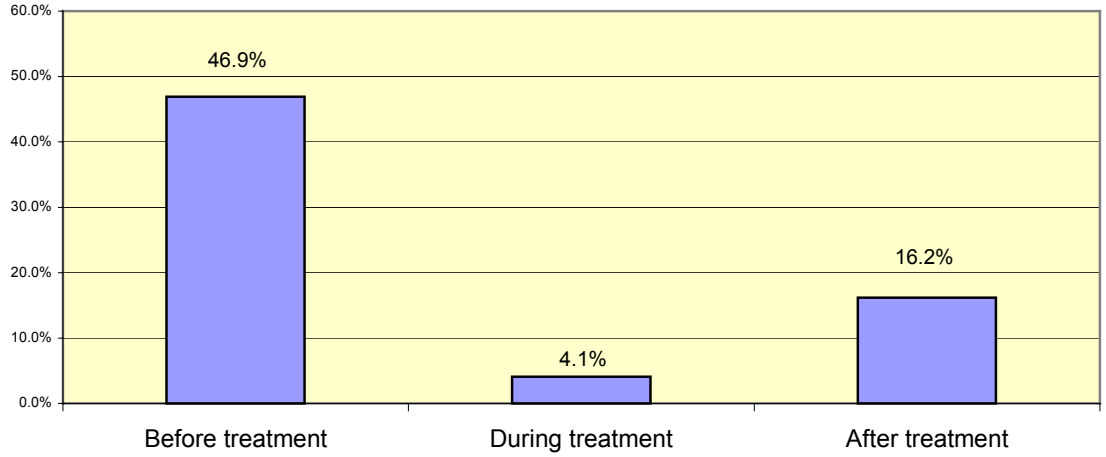
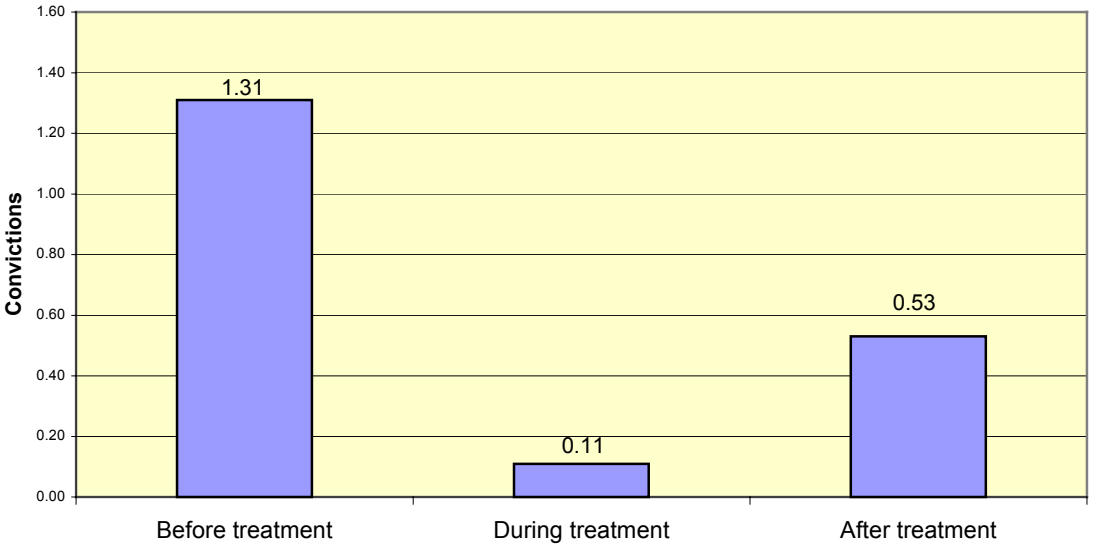


Figure 6. Conviction Rate for New Misdemanor/Felony Drug-Related Offenses Before, During and After Treatment



Drug-related time in jail before, during, and after treatment. Prevalence and rate of jail time for drug-related misdemeanor and felony offenses closely track findings for arrests and convictions in the before, during, and after treatment periods. Just over half (55.5%)

of SACPA clients have some jail time in Santa Clara County in the one-year period prior to treatment. That proportion declines to 4.3% in the during-treatment period and rises to 20.3% in the year after treatment (Figure 7). From the before- to the during-treatment period, the mean number of jail days drops from 23.8 to 2.0 and rises to 12.2 days in the after-treatment year (Figure 8).

Together, the data on arrests, convictions, and jail days suggest that treatment serves to decrease risk for arrest and conviction – and probably engagement in – criminal behavior involving drugs.

Figure 7. Percent of Clients with Any Misdemeanor/Felony Jail Days for Drug-related Offense Before, During, and After Treatment

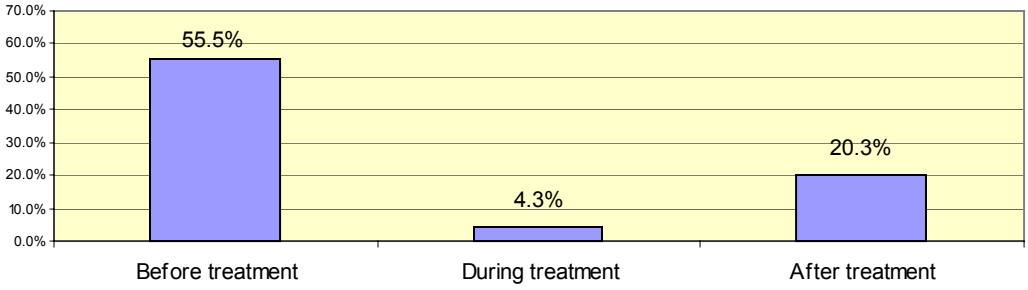
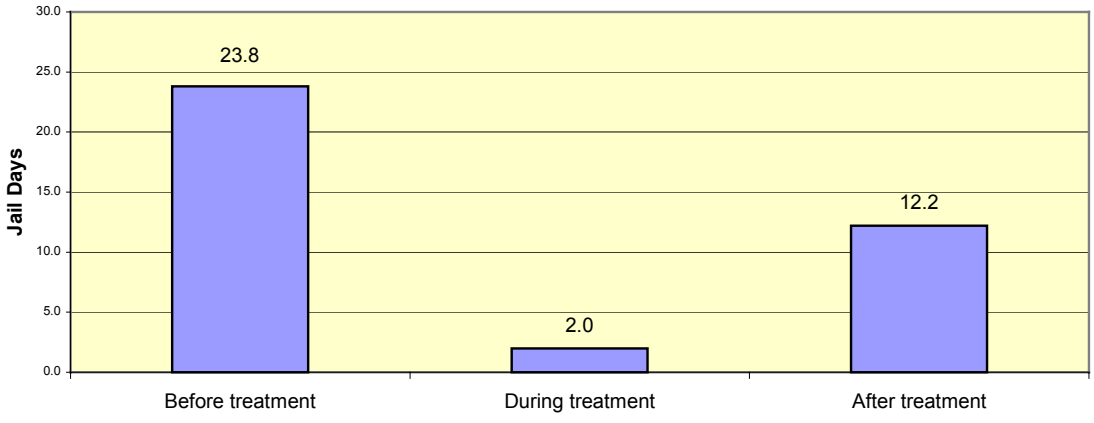


Figure 8. Mean Number of Misdemeanor/Felony Jail Days for Drug-Related Offenses Before, During, and After Treatment



New drug-related arrests and jail days before and after assessment. We were also interested in SACPA client experiences between assessment and the beginning of treatment. In this section we compare data from the one-year period before assessment to the time (median 0.5 months) between assessment and treatment entry. Figure 9 depicts the percent of clients with new misdemeanor and/or felony drug-related arrests before and after assessment. Figure 10 displays rate of new arrests.

Not surprisingly, the finding of 59.9% of clients with arrests pre-assessment is virtually identical to the figure for arrests pre-treatment (Figure 3, 59.2%). Noteworthy, however, is the 6.7% prevalence of arrests in the one-half month between assessment and treatment. The presumption is that the period between assessment and initiation of treatment is a time during which future treatment clients are at high risk for the commission of new offenses. The findings on arrest rates (Figure 10 versus Figure 4) and jail days (Figures 11 and 12 versus Figures 7 and 8) support the same interpretation: indicators suggest that substantial criminal justice activity takes place between assessment and treatment. The prevalence and rate of arrests and jail days between assessment and treatment are similar to the figures for the during-treatment period. However, the median during-treatment time period is approximately seven times the median length of time between assessment and treatment.

Jail days between assessment and treatment could be the result of the SACPA offense. However that would not be the case for new violations which result in arrest. In order to interpret this finding, arrest prevalence and rates were calculated *per month* for the various time periods to make them comparable. The proportion of clients with drug-related arrests per month is 4.9% in the year prior to treatment, 1.5% during treatment, 1.9% in the year after treatment, but a surprising 8.2% between assessment and treatment. The rate, i.e., number of arrests per client on a monthly basis, is .06 prior to treatment, .02 during treatment, .02 after treatment, but a very high .10 between assessment and treatment.

Figure 9. Percent of Clients with New Misdemeanor/Felony Drug-Related Arrests Before and After Assessment

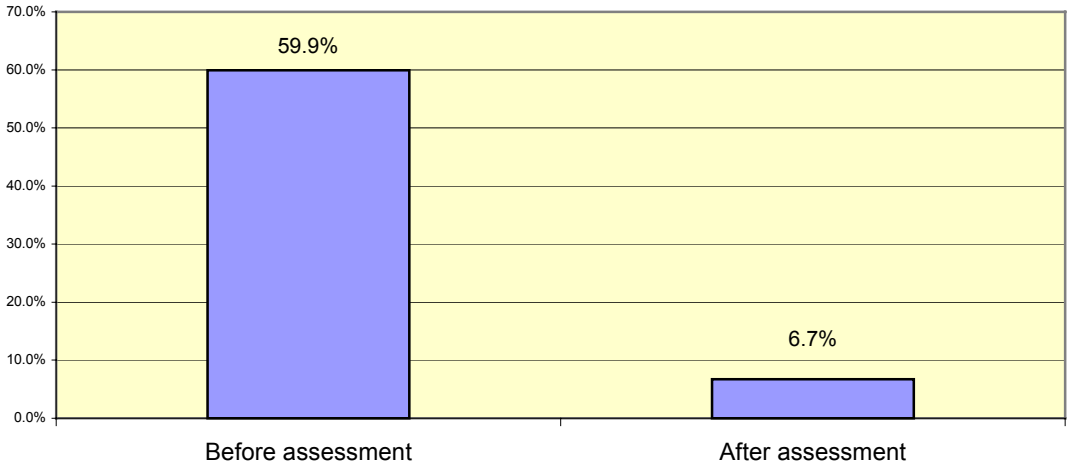


Figure 10. Arrest Rate for New Misdemeanor/Felony Drug-Related Offenses Before and After Assessment

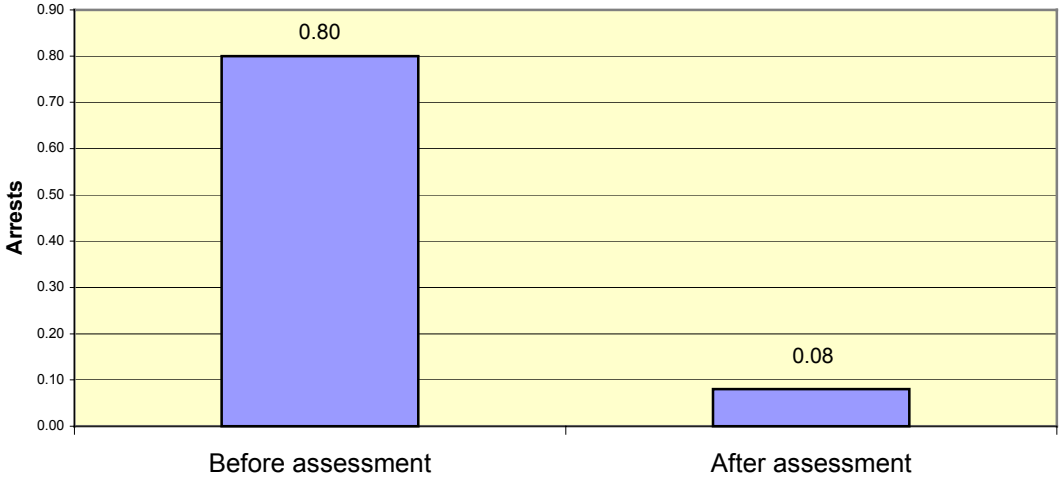


Figure 11. Percent of Clients with Any Misdemeanor/Felony Jail Days for Drug-related Offenses Before and After Assessment

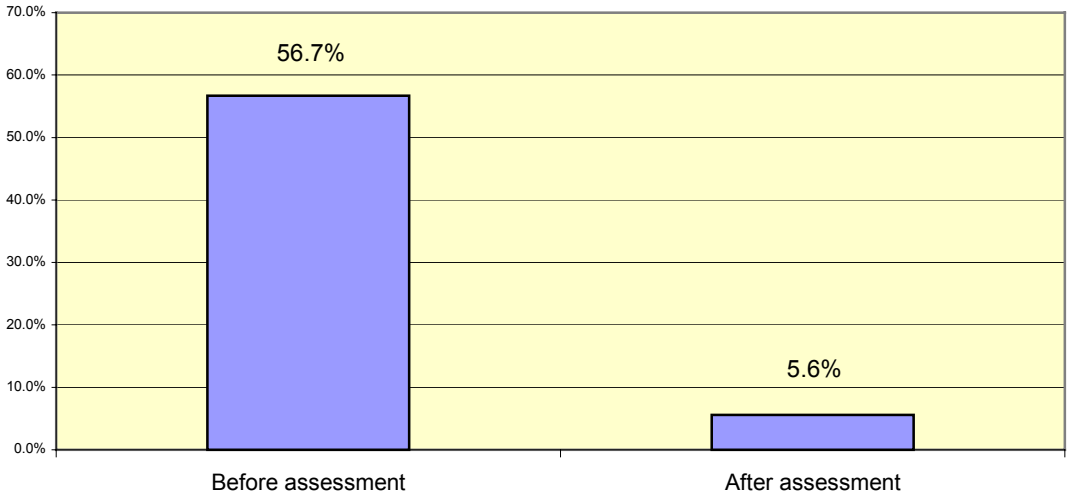
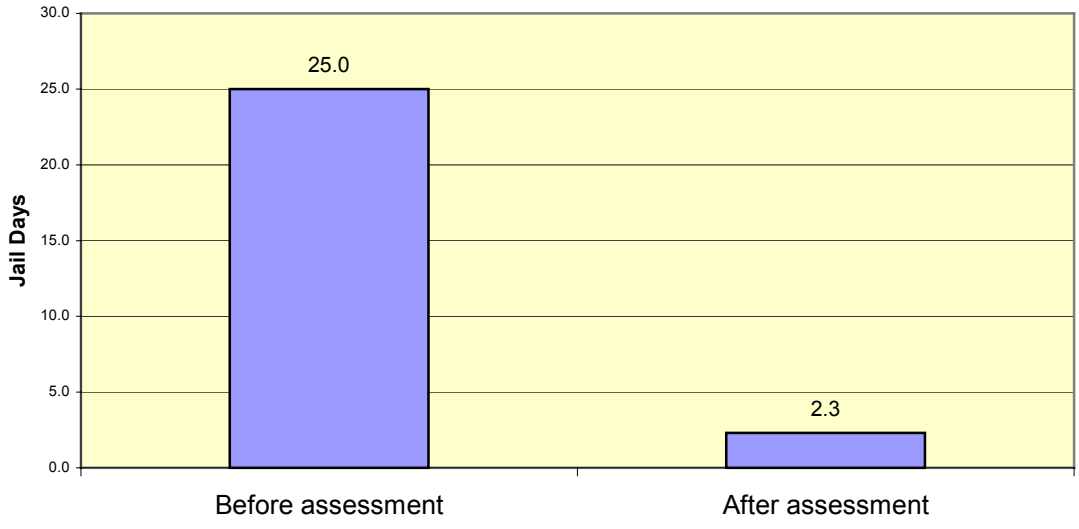


Figure 12. Mean Number of Misdemeanor/Felony Jail Days for Drug-Related Offenses Before and After Assessment



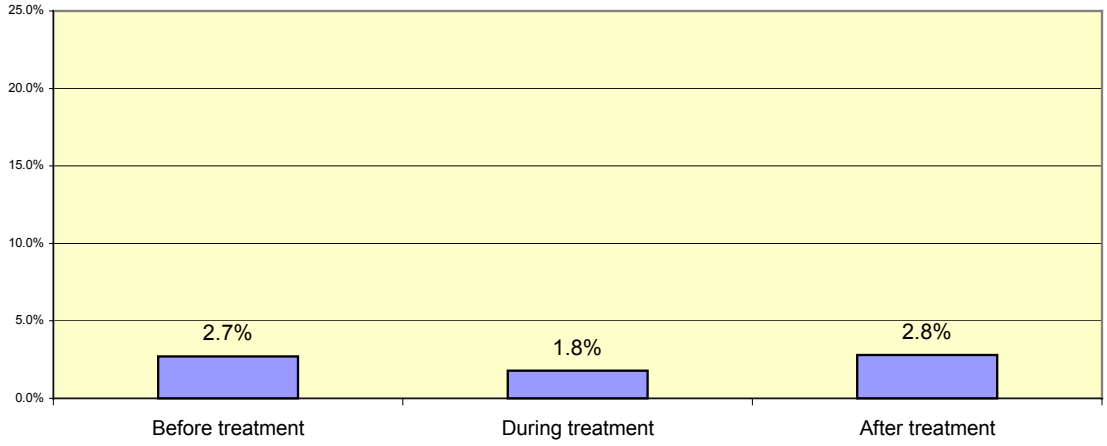
4b. Care for oneself financially

Difficulty securing and keeping work may be one indicator of a problem with alcohol and other drugs. Therefore, preparing for and gaining productive work is often a goal of treatment. While our dataset lacks direct measures of employment and work-related income, it does include information about receipt of four forms of public benefits. CalWORKs and General Assistance provide cash and Food Stamps a quasi-cash form of assistance for impoverished persons. Medi-Cal constitutes a health insurance program for poor Californians.

Three important considerations need to be stated before we examine findings in this area. First, initial treatment success may result in *increased* utilization of public benefits. Whether because of abuse of alcohol or other drugs, because of lack of information, or personal or familial disorganization, many individuals presumptively eligible for benefits either do not acquire them or lose them because of failure to comply with paperwork and other requirements. Upon treatment entry, counselors and case managers would may urge eligible clients to apply for these benefits. Second, even for those finding work, low wages from entry-level jobs may not eliminate eligibility for means-tested benefits, such as Food Stamps or cash assistance. Hence, even as treatment proves successful and employment is secured, benefit rates may increase rather than decrease. Third, all four indicators are sensitive to larger economic trends and to changes in program rules, such as time limits for receipt of CalWORKs and Food Stamps. Accordingly, limited to these administrative data, it is difficult to define what a *successful* outcome would be in a relatively short-term follow-up.

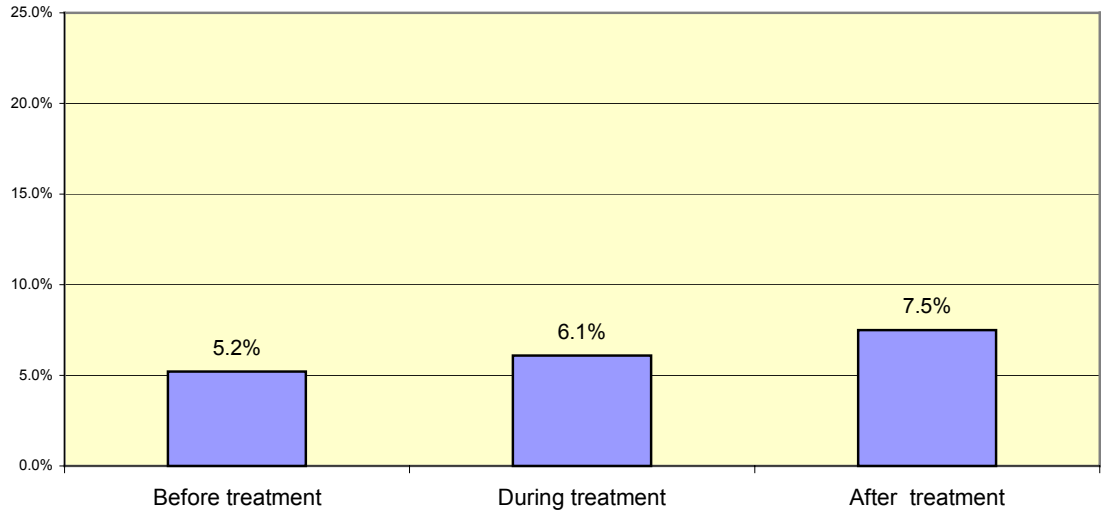
CalWORKs benefits were provided to 2.7% of SACPA treatment clients in the year prior to treatment (see Figure 13). During treatment the prevalence dipped slightly, to 1.8%. In the year following treatment 2.8% of clients received CalWORKs cash assistance.

Figure 13. Percent of Clients Receiving CalWORKs Cash Benefits Before, During, and After Treatment



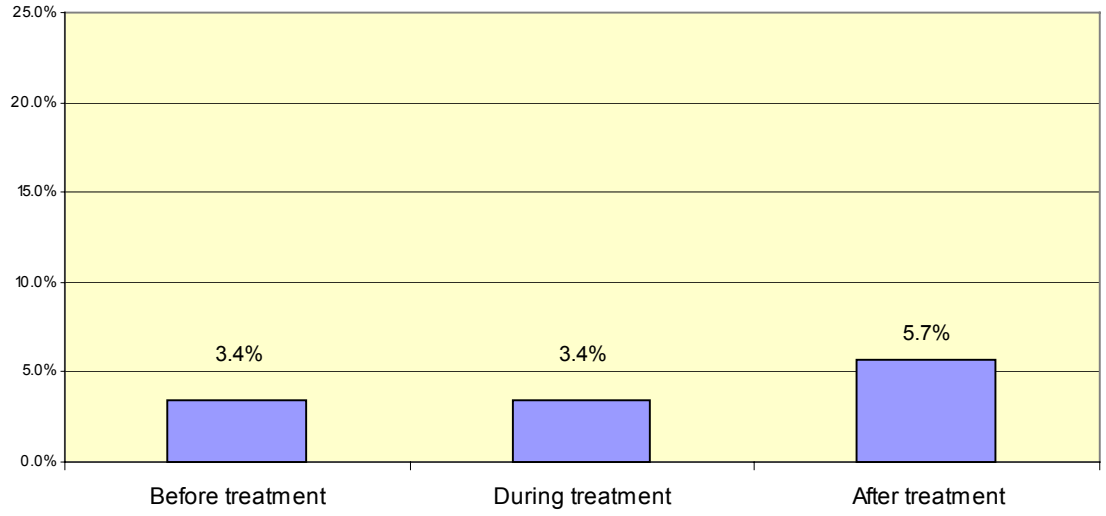
Food Stamps were provided to 5.2% of clients in the year before treatment, to 6.1% during treatment, and to 7.5% following treatment discharge (see Figure 14). Residential programs rely in part on clients' Food Stamps to support program costs. Hence the up-tick in Food Stamps receipt from the before to the during treatment period may reflect treatment counselors' urgings. Both counselors and case managers may also have urged clients to apply for Food Stamps to support their post-treatment needs. Increased interest in food may also be a sign of recovery.

Figure 14. Percent of Clients Receiving Food Stamps Before, During, and After Treatment



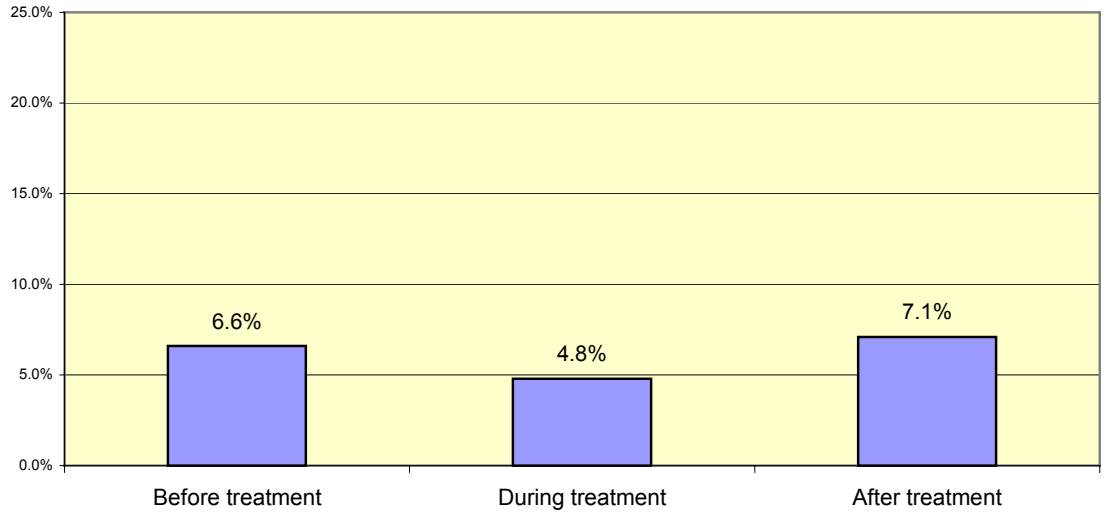
The prevalence of General Assistance receipt remained level at 3.4% in the before- and during-treatment periods and increased to 5.7% in the after-treatment year (see Figure 15).

Figure 15. Percent of Clients Receiving General Assistance Benefits Before, During, and After Treatment



Surprisingly, receipt of Medi-Cal eligibility dropped from 6.6% in the year prior to treatment to 4.8% in the during-treatment period before increasing to 7.1% following treatment (see Figure 16).

Figure 16. Percent of Clients Receiving Medi-Cal Benefits Before, During, and After Treatment



4c. Positive sense of well-being, lack of psychological distress

A useful, though imperfect, measure of well-being is receipt of county mental health services. That is, in a general sense, one can infer positive mental health among SACPA clients by lack of contact with the mental health system. On the other hand, for persons who had not been receiving needed services, we might infer that mental health would improve if regular engagement with the mental health system were initiated or resumed.

Figures 17 and 18 depict prevalence and rate of receipt of mental health services. Rate, in this case, is defined as the number of treatment episodes opened during the period of interest, not the number of service contacts received. In Figure 17 we see that the prevalence of receipt of mental health services was 12.8% in the year prior to SACPA treatment, 5.5% during the treatment period, and 11.8% in the year following treatment. Figure 18 shows, between the before- and during-treatment periods, a rate of service use steeper in decline than was seen for prevalence of use. Following treatment, as with prevalence, rate of mental health service use returns almost to the before-treatment level. The interpretation of these findings is difficult. As with cash assistance and other benefit programs among a service-using population, it may be that use of mental health services reflects not ill-health but a better understanding that mental health services are needed and accessible.

Figure 17. Percent of Clients Receiving Mental Health Services Before, During, and After Treatment

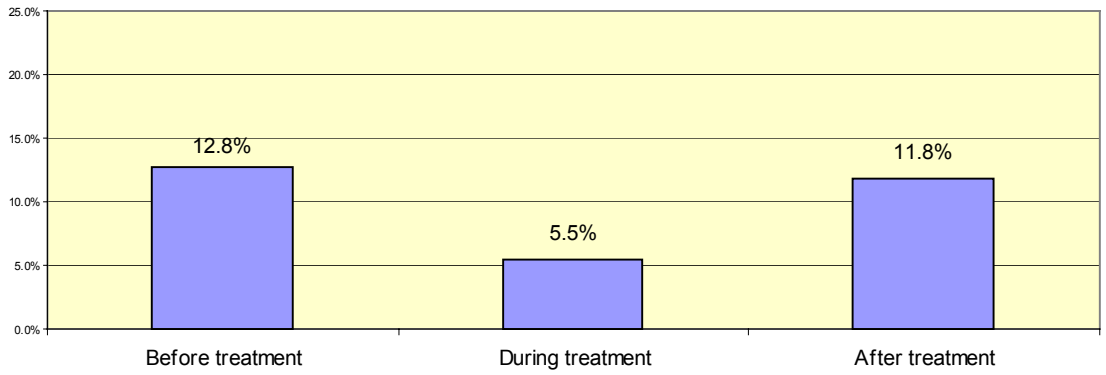
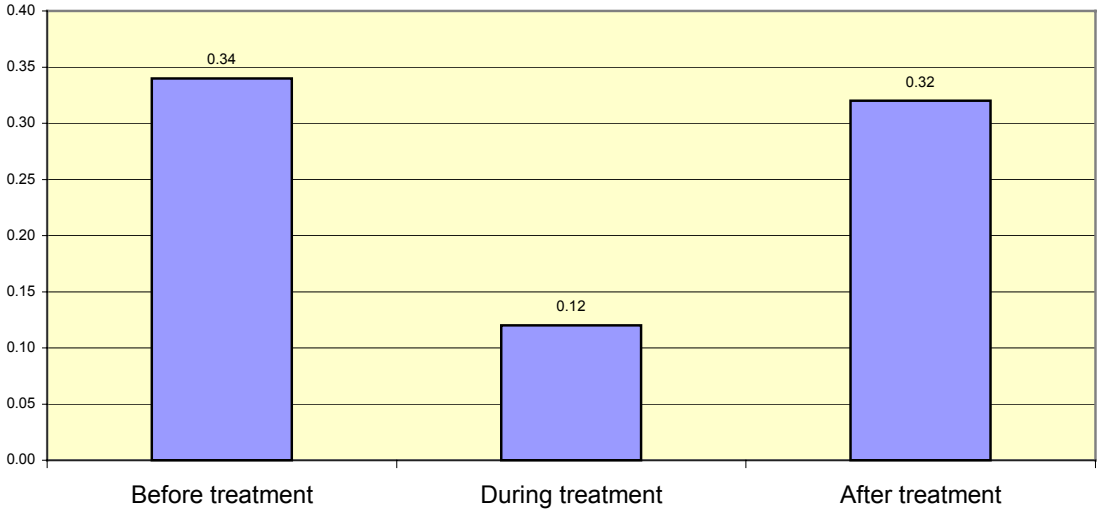


Figure 18. Rate of Mental Health Service Episodes Opened Before, During, and After Treatment



4d. Physical health

Improved physical health is often an objective of treatment services. Lack of hospitalizations and emergency room visits provide an indirect, if imperfect, measure of physical health. On the other hand, outpatient visits may indicate ill-health or may reflect appropriate use of preventative and routine medical care. Thus, while we would expect reduced numbers of emergency room visits and hospital stays following substance abuse treatment, outpatient service utilization might increase as former clients integrate routine and preventative care into their lives. Figures 19 through 25 display prevalence and rate statistics for the three types of health and hospital service utilization.

As displayed in Figure 19, prevalence of emergency room visits declined from 16.3% in the year prior to treatment to 7.6% during treatment and increased to 14.9% in the year following treatment. Rate of emergency room visits has a parallel decline from before to during treatment. Likewise, the after-treatment rate remains slightly lower than the comparable before-treatment figure (Figure 20). Prevalence and rate of emergency room visits during treatment is surprisingly large, given that median length of treatment is substantially less than half of a year.

Figure 19. Percent of Clients with ER Visits Before, During, and After Treatment

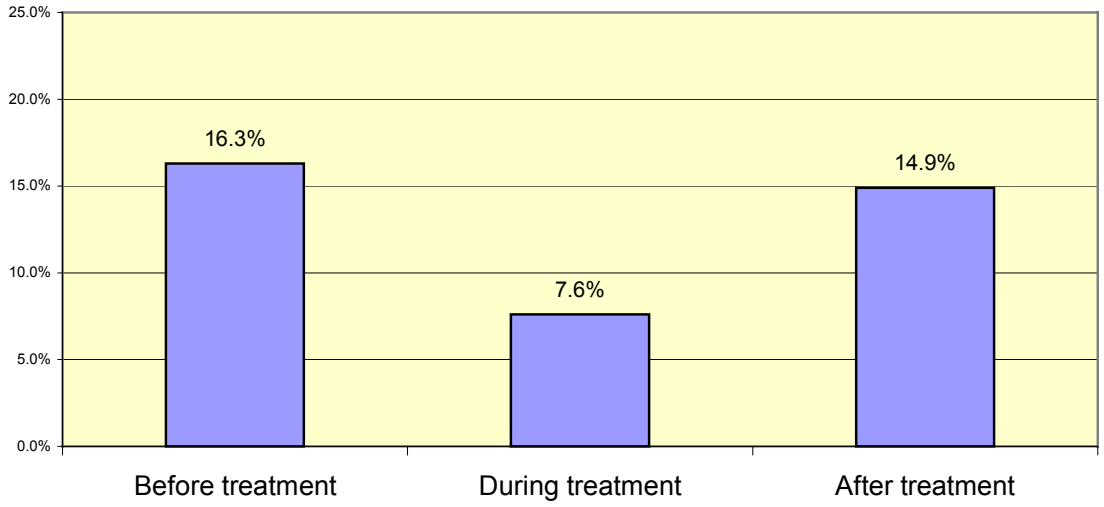
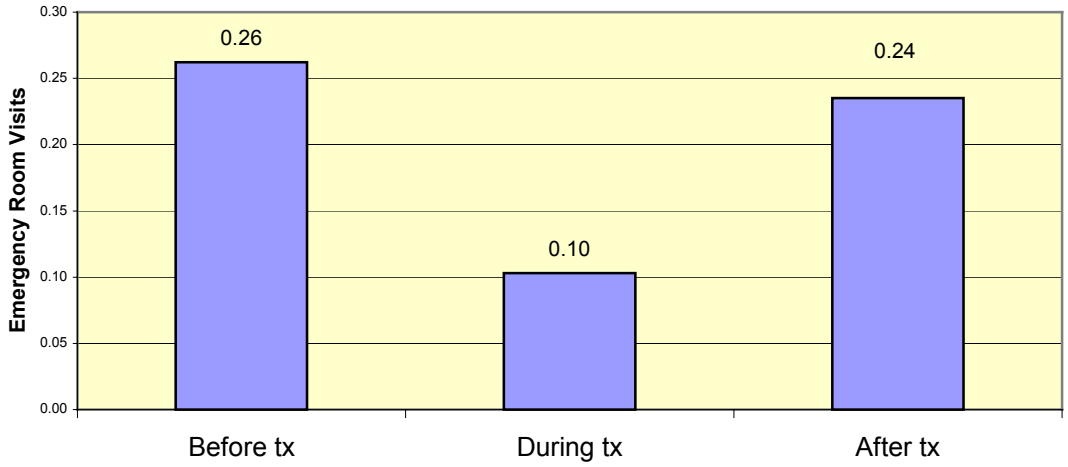


Figure 20. Rate of Client ER Visits Before, During, and After Treatment



Figures 21 and 22 display findings concerning inpatient hospitalization. Both prevalence and rate figures for inpatient care are generally low, showing a modest decline from before to during treatment followed, post-treatment, by an increase to above the before-treatment figures.

Figure 21. Percent of Clients with Inpatient Stays Before, During, and After Treatment

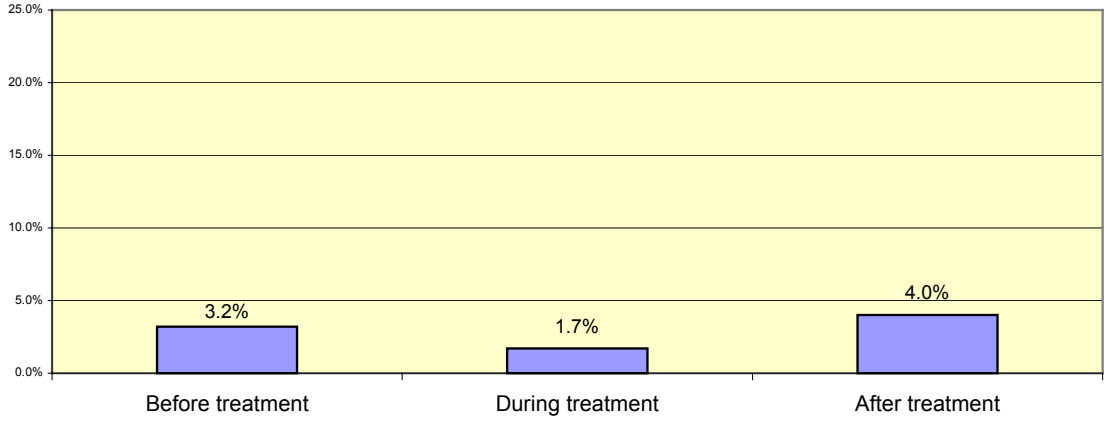
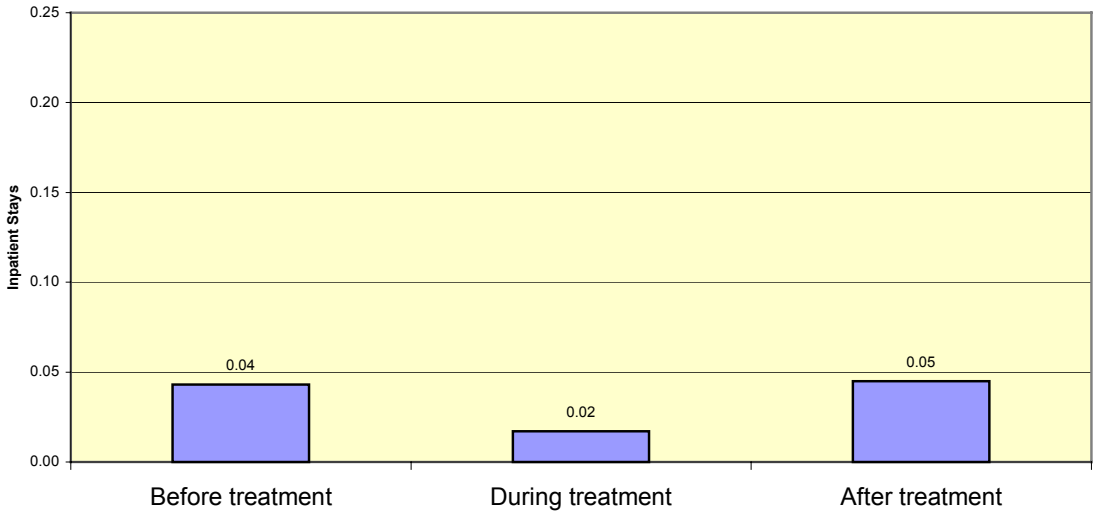


Figure 22. Rate of Client Inpatient Stays Before, During, and After Treatment



When comparing before- to after-treatment periods, outpatient utilization increased in prevalence and rate (Figures 23 and 24). In the year before treatment, 19.5% of SACPA clients used outpatient services at Valley Medical Center ambulatory care sites. Prevalence declined to 13.4% during treatment and increased to 23.5% in the year following treatment. Before- to after-treatment rates show an even bigger increase, rising from .31 visits per person-year before treatment to .68 visits per person-year following treatment. Further analysis would be necessary to discover whether or not this increase in rate is due to increased routine and preventative care.

Figure 23. Percent of Clients with Outpatient Visits at VMC Ambulatory Care Site Before, During, and After Treatment

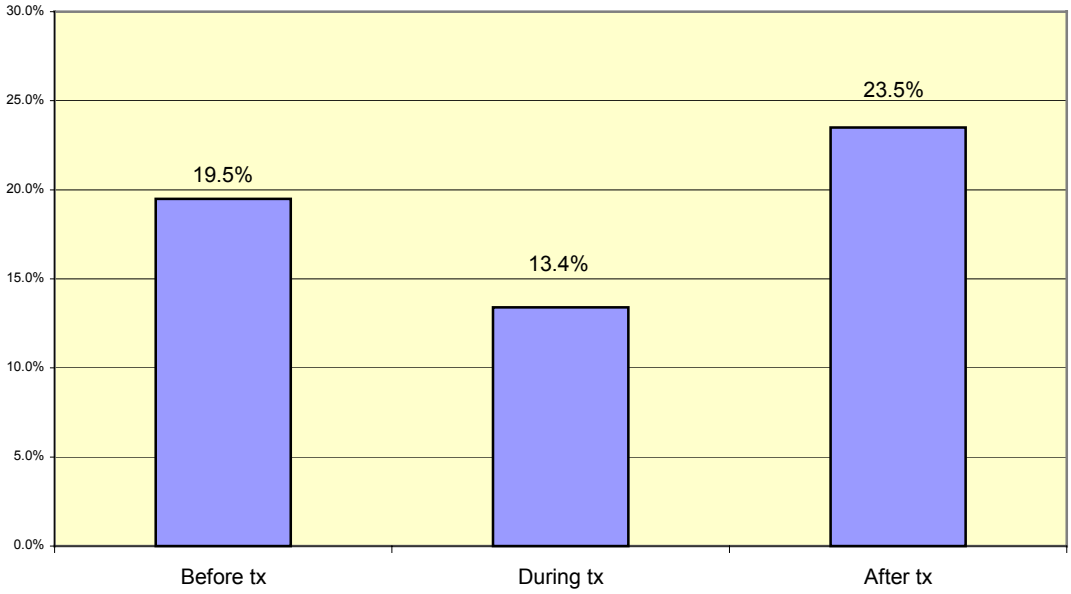
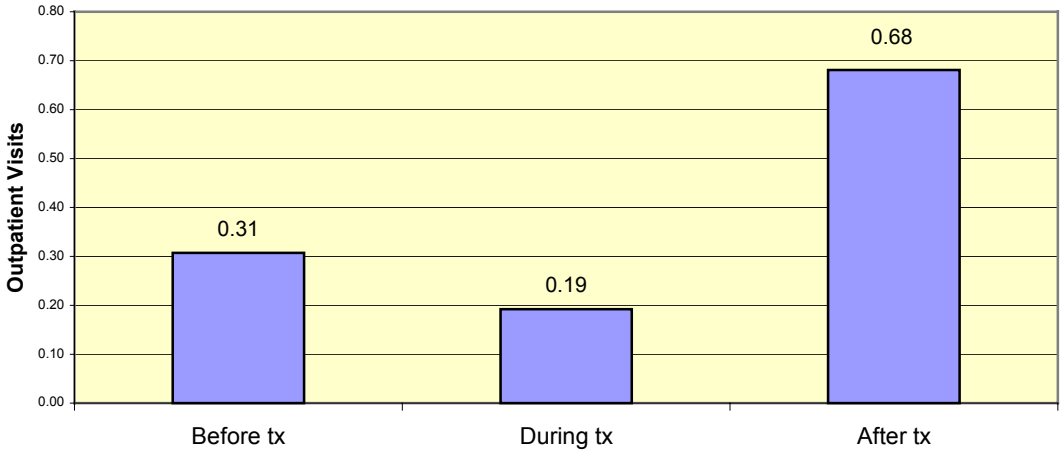


Figure 24. Rate of Client Outpatient Visits at VMC Ambulatory Care Sites Before, During, and After Treatment



5. Crime overall

The policy assumption of SACPA is that treatment for substance abuse will reduce crime significantly, with an impact not only on drug-related offenses but also on other charges

that may be *associated* with substance abuse. Violent offenses and property crimes, for example, may be part of a life pattern involving substance abuse. Therefore, we report on prevalence and rate for all new misdemeanor and felony arrests, convictions associated with those arrests, and associated jail days, whether drug- or non-drug-related. Generally, the patterns in the figures that follow resemble those for drug-only arrests, convictions, and jail days, though on a larger scale.

The prevalence of total new arrests declines from 74.7% in the year before treatment to 13.5% in the during-treatment period and 42.6% after treatment (Figure 25). Arrest rates follow, declining from 1.39 per person-year before treatment to .17 per person during the treatment period and increasing to .69 per person-year following treatment (Figure 26).

Figure 25. Percent of Clients with New Drug- and/or Non-Drug-Related Arrest for Misdemeanor/Felony Before, During and After Treatment

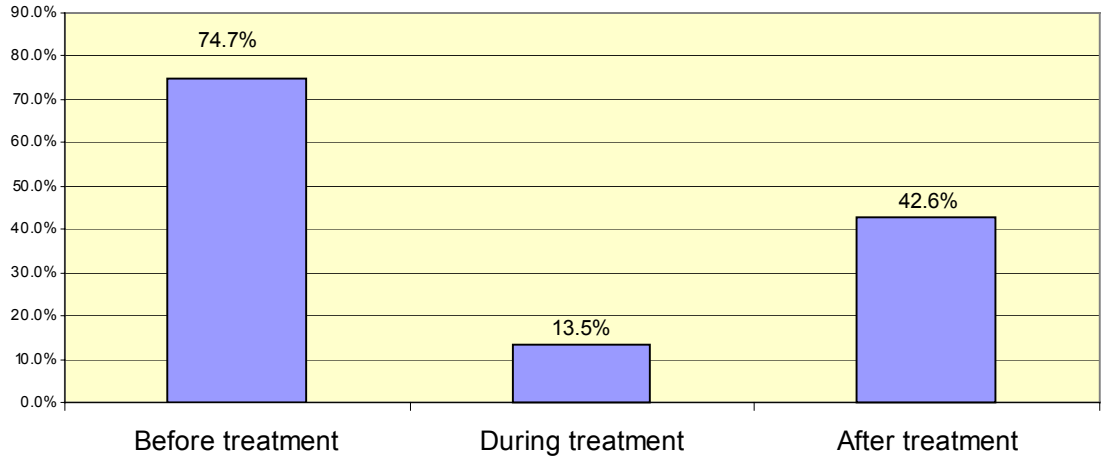
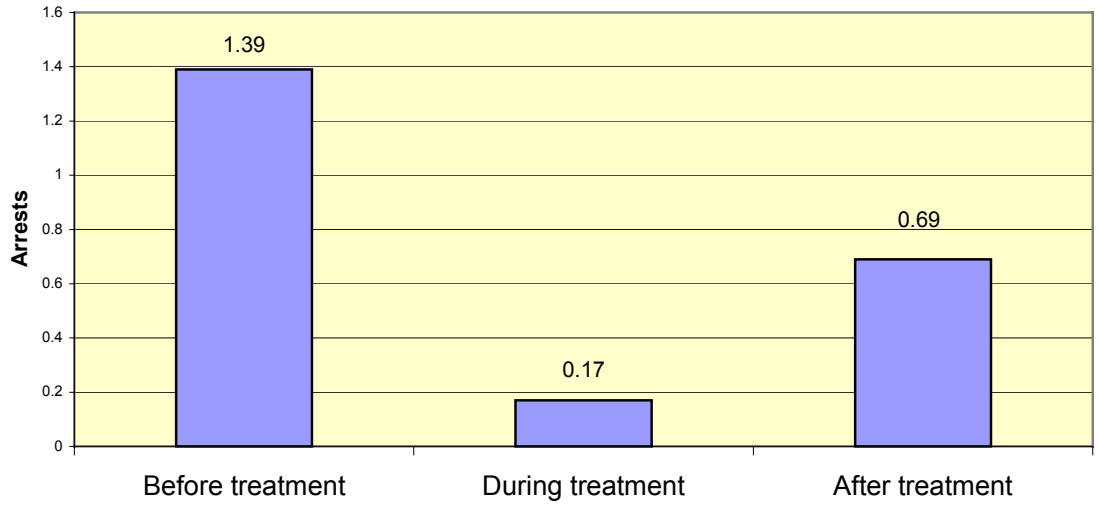


Figure 26. Rate of New Misdemeanor/Felony Drug- and/or Non-Drug-Related Arrests Before, During and After Treatment



Total convictions for new offenses decline from 66.3% for the before-treatment period to 11.6% during treatment and 35.2% following treatment (Figure 27). Rate of conviction drops from 3.32 per person-year before treatment to .41 per person for the treatment period and 1.81 per person-year following treatment (Figure 28).

Figure 27. Percent of Clients with Drug- and/or Non-Drug-Related Conviction for Misdemeanor/Felony Arrest Before, During and After Treatment

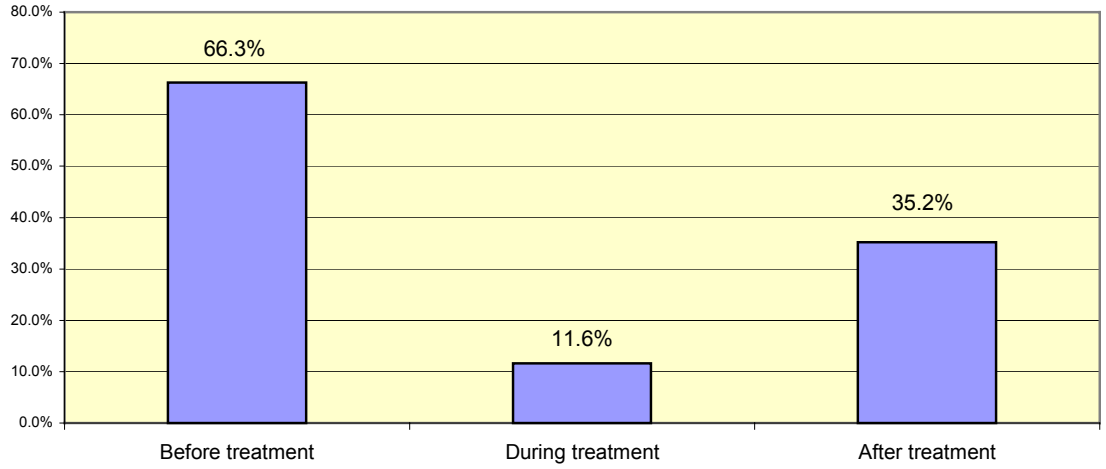
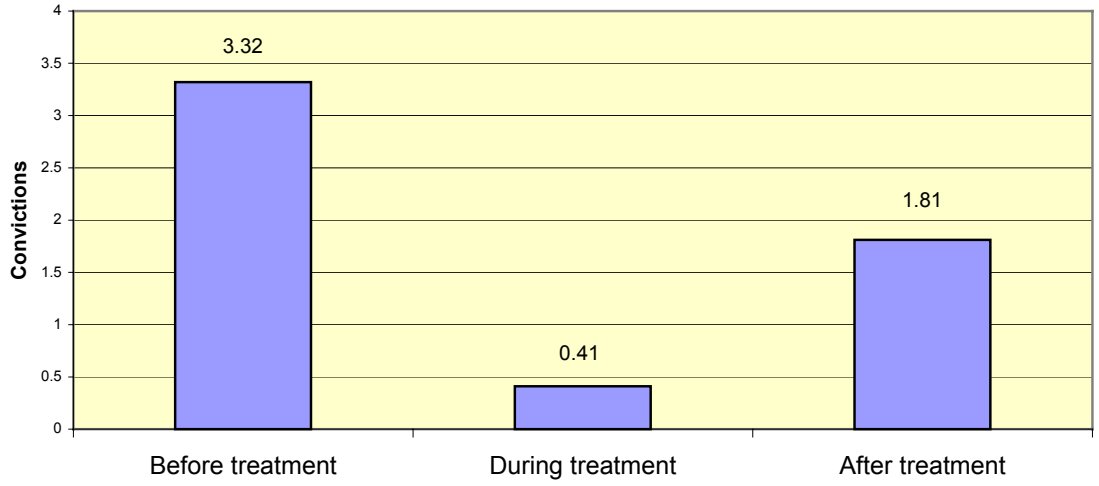


Figure 28. Rate of Misdemeanor/Felony Drug- and/or Non-Drug-Related Convictions for Arrests Before, During and After Treatment



The proportion of clients with days in jail for any misdemeanor or felony drops from 71.3% in the year before treatment entry to 10.3% during the treatment period and 36.5% in the year following treatment (Figure 29). In the same three periods rate of jail days varies from 37.8 jail days per person-year before treatment to 5.8 days per person during the treatment period to 25.7 days per person-year post-treatment (Figure 30).

Figure 29. Percent of Clients with Any Drug- and/or Non-Drug-Related Misdemeanor/Felony Jail Days Before, During, and After Treatment

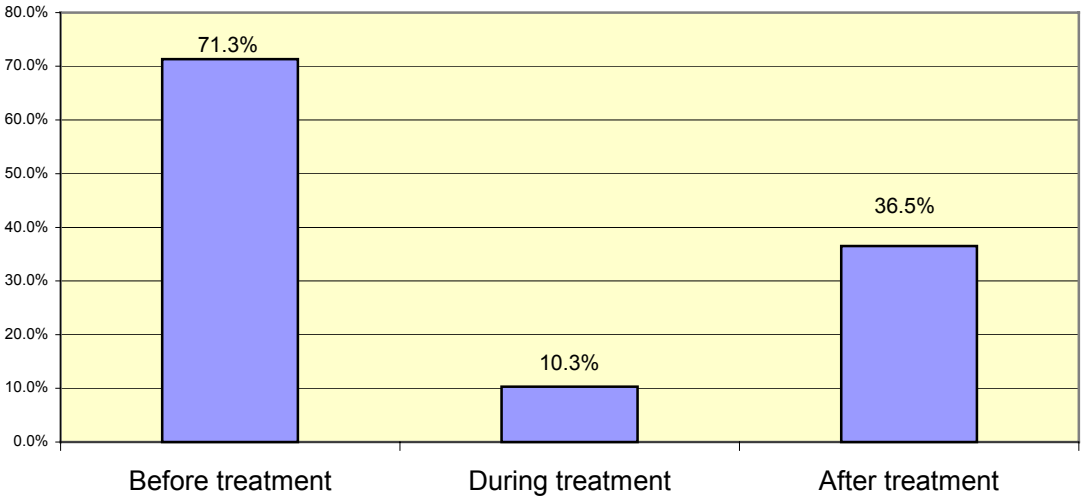
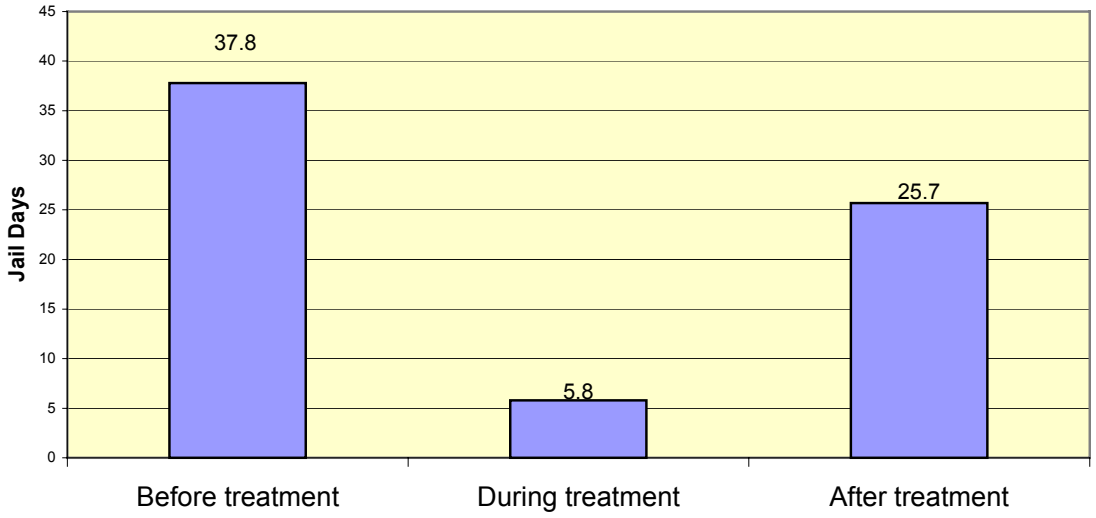


Figure 30. Rate of Any Drug- and/or Non-Drug-Related Misdemeaor/Felony Jail Days Before, During, and After Treatment



6. Comparisons with findings from the previous ADSRI Study

There is considerable interest in whether SACPA clients differ from other DADS clients, and whether DADS services – and generally the handling of SACPA clients – appears appropriate. A second purpose of this report is to enable comparison of outcomes for DADS clients overall with the subset of SACPA clients.

There are two limitations to hold in mind when comparing results of the previous DADS outcomes analysis with these SACPA outcomes findings. First, the time period covered in the previous ADSRI study (cohorts entering treatment in fiscal years 1997 - 1998 through 2000 – 2001) is not equivalent to that for this set of analyses (a cohort of individuals who were assessed for treatment between October 2001 and June 2002). There can be a partial overlap in base treatment period, and especially the follow-up period for the FY 2000 DADS cohort coincides in part with the treatment period for SACPA cases. A number of changes were made in the DADS system to implement SACPA, and both the distinctions in time period and introduction of program changes may contribute to different experiences for the two treatment cohorts. In turn, apparent differences between DADS and SACPA clients might be exaggerated.

Introducing additional difficulty for purpose of a strict comparison, some of the same clients are included in both datasets. That is, some SACPA clients in these analyses were DADS clients during the period covered by the previous report. Of the 1190 clients used in this study 326 (27%) were in the previous study. This overlap in the study population

tends to decrease apparent differences between DADS and SACPA clients even though the SACPA treatment was a new episode of care.

In the following, we compare SACPA client outcomes with DADS client outcomes from the closest time period to this study, FY 2000 - 2001. The FY 2000 – 2001 findings may be found at www.sccdads.org, Evaluation and Research Reports, *"Outcome Evaluation of the Department of Alcohol and Drug Services Using Performance Indictors from Secondary Data"*.

- Both relapse and maintenance returns are more prevalent for SACPA as contrasted with the DADS population generally. Some of this difference may be the result of closer scrutiny of the SACPA population, all members of which are under the close supervision of the court and, for some offenders, more intensive probation supervision than was utilized prior to SACPA.[18]

- Comparing before and after criminal justice measures available for both groups, SACPA clients start off looking worse but also demonstrate more improvement, compared to FY 2000 – 2001 DADS clients. Some of the positive change attributed to the SACPA population may be more overstated than that attributed to the DADS population, however, in light of statistical tendencies for population data to regress to the mean. (For more detail, see discussion under "limitations" below.)

- On three of the four financial stability indicators, SACPA clients start off at lower utilization of public benefits and over the study period increase utilization. This may be evidence of greater improvement for SACPA clients, who demonstrate greater access to and/or use of these benefits.

- On the two mental health measures, SACPA clients display less service use, compared to the DADS population. Utilization among both groups decreases over time, less so for the SACPA than the DADS group

- For the physical health dimensions, greater variation is evident. SACPA clients utilize hospital, emergency room, and outpatient services less than do DADS clients overall. However, when comparing change in service use, SACPA clients' use of outpatient and inpatient services increases at a faster rate compared to members of the DADS population. Emergency room visits decline for SACPA clients but increase for DADS clients in the FY 2000 – 2001 cohort.

[18] While Santa Clara County SACPA clients may have more direct contact with the court than with Probation, the point made by Marlowe et al. (2003) would appear relevant: Most probationers "fail to comply with their release conditions for probation including drug testing, attendance at drug treatment, and avoidance of criminal activity [references]." Intensive, supervised probation is associated with the worst outcomes, precisely because supervision is closer. Marlowe et al. (2003), p. 214.

- Changes in legal difficulties overall are quite similar for the two populations, but on each measure more positive change is evident for DADS clients, compared to the SACPA population.

Overall, we conclude SACPA clients do at least as well as the general DADS treatment population at a slightly earlier period of time.

7. Policy implications

The major finding is that treatment works, as intended in policy, and works at least as well for SACPA clients as for DADS clients in general. SACPA clients remain in treatment for well over three months, the amount of time generally found to be needed to produce positive outcomes. The treatment period is associated with fewer arrests, convictions, and jail days than would otherwise be expected. This finding is especially salient in light of the relatively poor results for SACPA clients in the brief period after assessment and before entry into treatment. Thus, we would suggest, efforts should be increased to provide for more rapid entry to treatment.

8. Limitations on interpretation of SACPA findings

There are three factors limiting interpretation of these findings that we wish to note. First, as mentioned above, we experienced an imperfect match between DADS and CJIC databases. However, although we lost 10% of the SACPA cases for analysis of criminal justice activity, we have no reason to expect that study results are biased.

Second, we rely on administrative data which were not collected for the purpose of monitoring the outcomes examined in this study. Partially as a result, there are problems with both over- and under-counting. As an example of under-counting, as a measure of relapse *returns to substance abuse treatment* misses both individuals experiencing a relapse who do not return to treatment and those who, having relapsed, secure treatment outside the DADS system. There are similar limitations with the criminal justice, social services, mental health, emergency room, outpatient services, and hospital data since only activity within Santa Clara County is captured by the available data systems. Arrests, convictions, and jail days are also imperfect measures, given their reliance on observation and action by the criminal justice system and a catchment area that does not extend beyond the County's borders. Much of the problem is presumed inconsequential for an over-time study such as this, however, since the same limitations apply to all time periods of interest. An important exception is discussed below. Hence, while few of the health, hospital, and criminal justice figures can be taken to represent absolute prevalence or rate of services utilization, or need for services, comparisons of prevalence and rate across time remain useful.

Social services measures are less likely to suffer from the under-count problem since, within the County, there is no other source of these particular benefits. However, there are alternate sources of financial support – family members, community agencies, and so forth – and individuals may secure health services under insurance coverage other than Medi-Cal. For further work with these data, we would suggest that trend lines be compared to agency trends overall, to control for environmental changes.

Finally, extreme caution must be used in interpreting one aspect of the criminal justice measures. There is not a one-to-one relationship between acts of criminality and arrests or convictions for those acts. Most crime goes unreported and undiscovered, and, among crimes discovered, many result in no arrest and/or no conviction. By definition, however, all members of the SACPA client group had, relatively recently, experienced at least one arrest and conviction that resulted in a SACPA sentence. Hence, we would expect a decrease in the percent of SACPA clients experiencing arrest, conviction, and jail days, even if nothing changed in the individual client's drug behavior during or after treatment.[19]

Some of these limitations will be addressed as we begin work on predictive models that can control for a number of important variables.

9. Next steps

What next? In addition to the multivariate studies, next steps could include (1) a larger or longer-term comparative study including the collection of prospective data for this or newer SACPA cohorts, as well as data on the remainder, or a comparison subset of, DADS clients, and (2) studies examining the SACPA cost savings attributable to DADS treatment.

[19] Prevalence could not increase beyond 100%, and statistics such as this tend to regress to the mean. Hence, to demonstrate success for the SACPA treatment program, we would need to find prevalence and rate figures lower than those projected through a sophisticated analytical process.