

# **Evaluation of the Substance Abuse and Crime Prevention Act**

## **SACPA COST-ANALYSIS REPORT (First and Second years)**

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The California Substance Abuse and Crime Prevention Act of 2000 (SACPA) requires that an offender convicted of a nonviolent, drug-related crime be offered probation and community-based drug treatment in lieu of jail or prison. UCLA conducted three studies assessing the cost implications and benefit-cost ratios of SACPA. Each showed that SACPA yielded cost savings to state and local governments. **Study 1, using a before-SACPA comparison group and all first-year SACPA-eligible offenders, found a net savings of \$2,861 per offender (N=61,609), yielding a benefit-cost ratio of nearly 2.5 to 1 (i.e., \$2.50 was saved for every \$1 invested). Study 2 determined that SACPA participants who completed the program achieved a benefit-cost ratio of approximately 4 to 1 (i.e., “completers” saved \$4 for every \$1 allocated). Study 3 found that cost savings for the second year of SACPA were similar to Study 1, with a benefit-cost ratio of 2.3 to 1.** Three conclusions follow from the cost analyses: **SACPA substantially reduced incarceration costs; SACPA resulted in greater cost savings for some eligible offenders than for others; and SACPA can be improved.** Recommendations encompass actions within and across several areas: statewide collaboration and coordination, offender eligibility criteria and alternative practices for high-cost offenders, systems integration, criminal justice, drug treatment, and strategic planning.

## EXECUTIVE SUMMARY

The California Substance Abuse and Crime Prevention Act of 2000 (SACPA) requires that offenders convicted of a nonviolent, drug-related crime be offered community-based drug treatment and probation in lieu of jail or prison. Evaluation reports on the first three years of SACPA have been produced.<sup>1</sup> To examine the cost offsets and the benefit-cost ratios of SACPA, three studies were conducted. Study 1 assessed SACPA as a policy, regardless of the degree of offender participation. Study 2 assessed variability of cost ratios in relation to offenders' degree of participation in drug treatment after their acceptance of SACPA at conviction. Study 3 compared cost estimates from the first to the second year of SACPA. All studies used a comparison group taken from a period before SACPA was implemented. An additional analysis examined the characteristics of high-cost offenders identified within the entire SACPA population.

The analysis covered costs in eight areas. Five were in criminal justice: jail, prison, probation, parole, and arrests and convictions. Two were in social services: drug treatment and healthcare. One additional area allowed accrued costs to be reduced by taxes paid by offenders on earnings and purchases. All studies used the “taxpayer perspective,” in which the focus is on costs to state and local governments. Costs were adjusted to 2004 dollars using the consumer price index or, where appropriate, the medical price index.

### **SACPA First-Year Cost Analysis (Study 1)**

Study 1 found a benefit-cost ratio of nearly 2.5 to 1, meaning that approximately \$2.50 was saved for every \$1 allocated to fund SACPA. Across the eight areas assessed, SACPA led to a total cost savings of \$2,861 per offender over the thirty-month follow-up period, representing a net savings to government of \$173.3 million (after subtracting \$3 million for state administrative costs).

Study 1 defined a SACPA-era group of 61,609 offenders that included all adults (age eighteen or older) who were, during SACPA's first year (July 1, 2001 to June 30, 2002), convicted of a SACPA-eligible offense with no concurrent offense or other circumstance that should have made them ineligible. The thirty-month followup period ended on or before

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<sup>1</sup> Longshore, D. et al., (2005), Evaluation of the Substance Abuse and Crime Prevention Act: 2004 Report. Los Angeles: UCLA Integrated Substance Abuse Programs; Longshore, D. et al., (2004), Evaluation of the Substance Abuse and Crime Prevention Act: 2003 Report; Longshore, D. et al., (2003), Evaluation of the Substance Abuse and Crime Prevention Act: 2002 Report.

December 31, 2004. The comparison group (N = 68,543) consisted of all adults convicted between January 1, 1997, and June 30, 1998, of an offense for which they *would have* been SACPA-eligible with no concurrent offense or other circumstance that should have made them ineligible. Study 1 used thirty-month pre- (followback or baseline) and post- (followup) periods<sup>2</sup> from the date of each offender's conviction. The followup period ended on or before December 31, 2000 for the comparison group. The benefit-cost profile of SACPA showed cost savings for prison (\$3,547 per offender), jail (\$1,531), parole (\$221), and taxes (\$59). Higher SACPA costs accrued for probation (\$198 per offender), arrests and convictions (\$1,326), drug treatment (\$743), and healthcare (\$230).

### **SACPA Drug-Treatment-Participation Cost Ratios (Study 2)**

Study 2 found that savings for drug-treatment completers reflected a benefit-cost ratio of about 4 to 1, despite higher treatment costs for this group. This indicates that approximately \$4 was saved for every \$1 allocated to a treatment completer under SACPA. Overall cost-savings per offender were more than twice as high for those who completed treatment (\$5,601) compared with those who never entered (\$2,468) or did not complete treatment (\$2,386).<sup>3</sup>

Study 2 examined variation in benefit-cost ratios in relation to SACPA-treatment participation. The study was based on the same SACPA population as in Study 1, but excluded those offenders who refused diversion to SACPA. Those who accepted SACPA sentencing were assessed in three groups: offenders who (1) were referred to SACPA but did not enter drug treatment, (2) entered but did not complete treatment, and (3) completed treatment. Like Study 1, Study 2 used thirty-month pre- and post-periods from the date of each offender's conviction.

For those who accepted SACPA but did not enter drug treatment, prison savings per offender were \$2,459, compared with \$4,058 for those with some treatment and \$6,175 for those who completed treatment. Jail savings followed a similar pattern, \$1,411, \$1,822, and \$2,372, respectively. Parole savings were roughly equivalent at \$211, \$245, and \$225. However, probation costs were higher at \$111, \$329, and \$336. Drug-treatment costs were higher for treatment non-completers and treatment completers at \$1,335 and \$2,027, respectively. There was a small drug treatment cost reduction for those who did not enter treatment (\$48). Healthcare costs were higher with level of treatment participation at \$154, \$260, and \$434, respectively. Arrest and conviction cost increases were lower for treatment completers (\$552) than for those who did not enter treatment (\$1,440) and for those who did not complete treatment (\$1,859).

### **SACPA Second-Year Replication (Study 3)**

Using twelve-month pre- and post periods, the benefit-cost ratio in the second-year was found to be very similar to the first-year ratio (2.1 to 1 for the first year and 2.3 to 1 for the second year). The overall cost savings to government were \$2,280 per offender for first-year SACPA offenders (\$140.5 million in total) and \$2,306 for second-year offenders (\$158.8 million in total).

Study 3 examined costs in SACPA's first two years using each year's total SACPA-eligible population (as in Study 1), but with pre- and post-periods of twelve months. Benefit-cost ratios were stable across the two years, with only a few differences. Prison cost savings were \$1,879 for the first-year SACPA offenders and \$1,826 for the second-year; jail cost savings were \$1,555

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<sup>2</sup> Although the respective meanings are the same, the terms pre- and post- are commonly used in discussion of experimental design; the terms followback and followup are typical in economic research; and the term baseline is used for comparison in reporting results. UCLA used the terms as appropriate to the context within the report.

<sup>3</sup> Although SACPA offenders who received some drug treatment showed reductions in prison and jail time over those who did not enter treatment, these savings were offset by treatment costs and somewhat higher rates of arrest and conviction in the followup period. When only criminal-justice costs are considered, the cost savings are as expected: no treatment, least; some treatment, intermediate; and completed treatment, most.

and \$1,211, respectively. Arrest and conviction cost increases were lower for the second-year cohort (\$313) than the first-year (\$555).

### **Sub-studies: Findings**

*High-cost offenders.* UCLA found that a few SACPA offenders (1.6%) contributed a disproportionate share of criminal-justice costs. These offenders (N = 1,010) mostly had five or more convictions in the thirty months before their SACPA-eligible conviction. Their post-period crime costs were ten times higher than those for the typical offender (\$21,175 versus \$2,254).

*Adult welfare.* At the time of SACPA implementation, welfare reform was well underway in California. Changes in beneficiary eligibility and duration of benefits that resulted from welfare reforms could not be distinguished from the impact of SACPA and were therefore excluded from the cost model. A brief descriptive analysis of these data is provided in the findings section in this report.

### **Conclusions and Recommendations<sup>4</sup>**

Three conclusions follow from the cost analyses: (1) SACPA substantially reduced incarceration costs; (2) SACPA resulted in greater cost savings for some eligible offenders than for others; and (3) SACPA can be improved. The savings from SACPA are due largely to reductions in jail and prison terms. Cost increases were due primarily to subsequent arrests, convictions, and drug treatment. Probation and parole-cost changes were modest, as were increases in healthcare costs and contributions from taxable earnings. Overall, based on findings from the taxpayer perspective, continued funding for SACPA is justified.

Briefly stated, recommendations cover six areas, requiring the involvement of many systems and agencies. Activities to achieve the following recommendations should yield a more efficacious program, with attendant cost benefits: (1) increased collaboration and coordination within and across state and county governments; (2) improved system integration by all involved agencies within the counties, including greater utilization of probation and program urine-test results; (3) more attention to suitability screening for, and higher acceptance and participation rates by, offenders referred to drug treatment under SACPA, as well as increased use of strategies to improve offender accountability; (4) improved matching of severity of dependence to intensity of services; (5) more accessible and culturally relevant services for special populations (e.g., those with psychiatric problems, minorities); and (6) more attention to continuity of care and treatment-aftercare services. The Department of Alcohol and Drug programs should develop and implement a long-range strategic plan, guided by past and ongoing program experience and evaluation research, to improve SACPA in each successive year.

### **Research Methods**

The cost analysis uses a regression-adjusted<sup>5</sup> difference-in-differences (DID) approach to estimate cost changes under SACPA. Data were obtained from administrative databases maintained by the relevant state agencies. The UCLA DID analysis compared the cost differences from pre- to post-conviction for each offender in SACPA to the differences observed in the comparison group. The UCLA DID design improves on designs used in prior benefit-cost studies by enabling the identification of changes directly attributable to the law, overcoming concerns of potential biases with self-report data by using data from administrative databases, and providing more information by using long baseline and followup periods. Overall, these improvements in design, analytic procedures, and data sources lend additional weight to the findings over other cost-evaluation methodologies.

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<sup>4</sup> See also main report and Appendix B, where more extended conclusions, recommendations, and suggested strategies are discussed.

<sup>5</sup> Regression adjustment uses multivariate statistical techniques that minimize any spurious effects due to differences in sample composition or other possible covariates.

## SACPA COST-ANALYSIS REPORT (First and Second Years)

### INTRODUCTION

In November 2000, California voters passed Proposition 36, which was enacted as the Substance Abuse and Crime Prevention Act of 2000 (SACPA). SACPA represented a major shift in criminal-justice policy in California. Under the law, adults convicted of nonviolent drug offenses and who meet SACPA eligibility criteria can be sentenced to probation with drug treatment instead of incarceration or probation without treatment. Offenders on probation or parole who commit nonviolent drug offenses or who violate drug-related conditions of their supervision can also receive treatment. SACPA legislation required that a public university in California evaluate the effectiveness and financial impact of the programs funded pursuant to the requirements of the act. The California Department of Alcohol and Drug Programs (ADP), through a competitive bid process, chose the University of California, Los Angeles, Integrated Substance Abuse Programs (UCLA) to conduct the evaluation over a 5½-year period beginning January 1, 2001 and ending June 30, 2006. Evaluation reports on the first three years of SACPA have been produced by UCLA.<sup>6</sup> This benefit-cost analysis is a critical portion of the evaluation.

The purpose of the SACPA benefit-cost analysis was to examine: 1) overall costs to state and local government for drug offenders *eligible* for SACPA, 2) cost patterns based on the degree of SACPA treatment participation by offenders and 3) possible changes in cost outcomes over SACPA's first and second years. Study 1 calculated the benefit-cost ratio attributable to SACPA as a policy, that is, as a change in law that applied to all offenders throughout the state, regardless of the degree of offender participation. Study 2 examined variation in benefit-cost ratios in relation to offenders' degree of participation in SACPA treatment. This study assessed benefit-cost outcomes for offenders who accepted the drug treatment option at conviction (i.e., accepted referral to the SACPA program), whether they complied and entered drug treatment, and whether they completed the planned treatment duration. A particular focus of Study 2 was the benefit-cost ratio for drug treatment completers. Study 1 and Study 2 were based on SACPA's first-year population of eligible offenders and covered a 30-month pre-, or baseline, period and a 30-month post-, or follow-up, period from the eligibility conviction.<sup>7</sup> Study 3 examined the potential change in benefit-cost ratio estimates from the first to the second year of SACPA to determine whether cost outcomes changed as the SACPA policy matured. Study 3 used a pre- and post-period of 12 months. All three studies used the "taxpayer perspective," focusing on costs to state and local governments. Results are expressed in average cost or savings per offender. Furthermore, all costs were adjusted to 2004 dollars to allow standardization across multiple years.

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<sup>6</sup> Longshore, D., et al. (2005). *Evaluation of the Substance Abuse and Crime Prevention Act: 2004 Report*. Los Angeles: UCLA Integrated Substance Abuse Programs; Longshore, D., et al. (2004). *Evaluation of the Substance Abuse and Crime Prevention Act: 2003 Report*. Los Angeles: UCLA Integrated Substance Abuse Programs; Longshore, D., et al. (2003). *Evaluation of the Substance Abuse and Crime Prevention Act: 2002 Report*. Los Angeles: UCLA Integrated Substance Abuse Programs.

<sup>7</sup> Although the respective meanings are the same, the terms pre- and post- are commonly used in discussion of experimental design; the terms followback and followup are typical in economic research; and the term baseline is used for comparison in reporting results. UCLA used the terms as appropriate to the context within the report.

This report provides the essential findings and the following conclusions and recommendations of the three studies. It also summarizes the complex analytic process undertaken to provide valid and consistent data, appropriate analysis, and suitable adjustments for the cost components under consideration. The analysis was originally designed to cover costs in ten areas. Five were in criminal justice: jail, prison, probation, parole, and arrests and convictions. Four were in social services: drug treatment, healthcare, mental health, and welfare. One additional domain assessed offender contributions to state and local government through taxes on earnings (income tax) and purchases (sales tax). However, two social-service areas, mental health and welfare, could not be assessed under the analytic design of the benefit-cost study due to incomplete data coverage (mental-health costs) and a concurrent policy reform, welfare reform, that made it impossible to disentangle the effect of SACPA on welfare receipts from the effect of the other reform (welfare costs). Hence, benefit-cost results are based on the remaining eight areas. The savings and costs reported across the eight areas (modules) represents the net savings (or costs) that can be attributed to SACPA.

## **Background**

SACPA was enacted by California voters as a statewide policy that changed the course of criminal-justice processing for all eligible offenders, whether or not they chose to participate in the program. The policy also affected all service entities that interact with the pool of eligible offenders. The most rigorous and conservative scientific approach required the construction of a comparison group. Since the most-preferred study design, with offenders randomly assigned to either SACPA or non-SACPA interventions, was not possible, a comparison group was constructed by selecting similar offenders convicted of SACPA-eligible crimes from a period before SACPA was implemented. UCLA compared the total statewide costs for drug offenders eligible for SACPA (N = 61,609) during its first year to total statewide costs for a selected comparison group of drug offenders before SACPA was initiated (N = 68,543).<sup>8</sup> The analytic approach used is a significant improvement to that of cost studies limited to single-group, pre/post-designs, such as the California Drug and Alcohol Treatment Assessment (CALDATA) and the California Treatment Outcome Project (CalTOP).<sup>9</sup> The SACPA cost analysis also improved on such studies by using official records for data sources, thus removing the need to rely primarily on subject self-report. Finally, the study used lengthy pre- and post-periods, thus limiting the effects of “regression to the mean,” which can spuriously inflate post-intervention benefits.<sup>10</sup>

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<sup>8</sup> While the comparison and SACPA groups had different sample sizes, the samples were used only to obtain per-offender costs in the eight areas. Once these costs were determined, the calculation of total costs was rebased to the SACPA sample size.

<sup>9</sup> Gerstein, D.R., et al. (1994). *Evaluating recovery services: The California Drug and Alcohol Treatment Assessment (CALDATA)*. California Alcohol and Drug Programs. [www.adp.cahwnet.gov/pdf/caldata.pdf](http://www.adp.cahwnet.gov/pdf/caldata.pdf); Hser, Y.I., et al. (2005). *The California Treatment Outcome Project (CalTOP) Final Report*. UCLA Integrated Substance Abuse Programs. [www.uclaisap.org/caltop/FinalReport/Cover Page.pdf](http://www.uclaisap.org/caltop/FinalReport/Cover Page.pdf).

<sup>10</sup> “Regression to the mean” refers to the tendency for individuals with below-average problems and costs in one period to have more problems and higher costs in the next period, and vice versa for those with above-average problems and costs. Many individuals enter treatment when they have the most problems (Harwood et al., 2002). This is especially true for individuals entering treatment under a court mandate following a conviction. It is quite possible that, in the absence of the treatment intervention, the client would have improved on a number of outcome measures, i.e., part of the beneficial pre/post change would have been observed anyway.

The benefit-cost analysis comprises three studies. Study 1 calculated the net savings (or costs) and benefit-cost ratio attributable to SACPA as a policy applied statewide to all eligible offenders. Study 2 examined variation in cost ratios in relation to offenders' degree of participation in SACPA. A particular focus of Study 2 was the benefit-cost ratio for offenders who completed their SACPA drug treatment program. Study 1 and Study 2 were based on SACPA's first-year population and covered a thirty-month pre-period and a thirty-month post-period from the *eligible conviction*. Study 3 examined the change in net savings (or costs) from the first to the second year of SACPA to assess if maturity of the policy may have changed cost outcomes. This analysis made it possible to compare more precisely each year's costs to the \$120 million annual allocation provided for drug treatment and other services by SACPA.<sup>11</sup> Study 3 replicates the first-year analysis, and confers greater confidence in the results of Study 1. However, since the second-year cohort was drawn from a more recent period than the first-year cohort, there was a shorter period available for follow-up. As a result, Study 3 used twelve-month pre- and post-periods around the SACPA-eligible conviction in order to capture equal periods for comparison of the first- and second-year SACPA offenders. As noted earlier, all three studies used the "taxpayer perspective," in which the focus is on costs to state and local governments. All costs were adjusted to 2004 dollars using the consumer price index or, where appropriate, the medical price index.<sup>12</sup> Costs have been rounded to the nearest dollar.

The findings, conclusions and recommendations, and analytic methods are summarized in this report and its appendices. Study findings are presented in the first section, followed by conclusions and recommendations. A final section describes the analytic design employed, the data used, and methodological techniques applied. Four appendices supply pertinent detail.

## FINDINGS

### SACPA First-Year Cost Analysis (Study 1)

Study 1 compared offenders eligible for SACPA with a before-SACPA group of offenders who *would have* been eligible for SACPA under the law's provisions.<sup>13</sup> The purpose of this analysis was to calculate the cost attributable to SACPA *as a policy*. The SACPA group was the population of adults (eighteen or older) who were, during SACPA's first year (July 1, 2001 to June 30, 2002), convicted of a SACPA-eligible offense with no concurrent non-drug offense or other circumstance that made them ineligible. The thirty-month followup period for each SACPA offender ended on or before December 31, 2004. The comparison group<sup>14</sup> was drawn from a population of adults convicted of an offense for which they *would have* been SACPA-eligible had they been convicted after SACPA was implemented, with no concurrent non-drug offense or other circumstance that would have made them ineligible. This population of offenders

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<sup>11</sup> The study conservatively assumes programmatic costs to be \$117 million under SACPA, excluding \$3 million of the \$120 million annual allocation that was used to cover state-level administrative expenses.

<sup>12</sup> U.S. Department of Labor, Bureau of Labor Statistics. Consumer Price Index: 1913–2005, [data file]. Washington, DC: [www.bls.gov/data](http://www.bls.gov/data).

<sup>13</sup> Offenders were drawn from official California Department of Justice records on arrests and convictions with subsequent computerized eligibility screening. These numbers are larger than those estimated in prior reports, which were obtained from stakeholder surveys or the centralized SACPA Reporting Information System (SRIS) derived from county inputs.

<sup>14</sup> Because the comparison group was, of necessity, drawn from a different period, it is technically known as a time-lagged comparison group.

was convicted between January 1, 1997 and June 30, 1998. The thirty-month followup period for all comparison offenders ended on or before December 31, 2000, at least six months before SACPA may have begun to affect the involved systems. Findings covered thirty-month pre- and post-period beginnings with the date of each offender's conviction.

This section first reports the difference-in-differences, or DID, calculated as the difference between (1) the SACPA group's pre-conviction and post-conviction difference in costs and (2) the comparison group's pre-conviction and post-conviction difference in costs (see the Research Methods section). This yields a DID average-cost per offender in each cost area. Later, the cost profile of SACPA-related costs or savings across all eight areas is reported.

#### *Cost per offender*

The estimates below reflect regression-adjusted average<sup>15</sup> (mean) savings or costs per offender for the total comparison and SACPA groups in each cost category.<sup>16</sup> Costs were calculated based on events, as captured in state administrative data bases, multiplied by the costs associated with the event, as determined from data or from published sources.

The figures report costs in the pre-, or baseline, period; costs in the post-, or followup, period; differences from pre- to post- for each group; and the DID between groups (costs are positive numbers and savings are negative numbers). The full assumptions and statistical techniques underlying these estimates are provided in the Research Methods section.

#### *Prison*

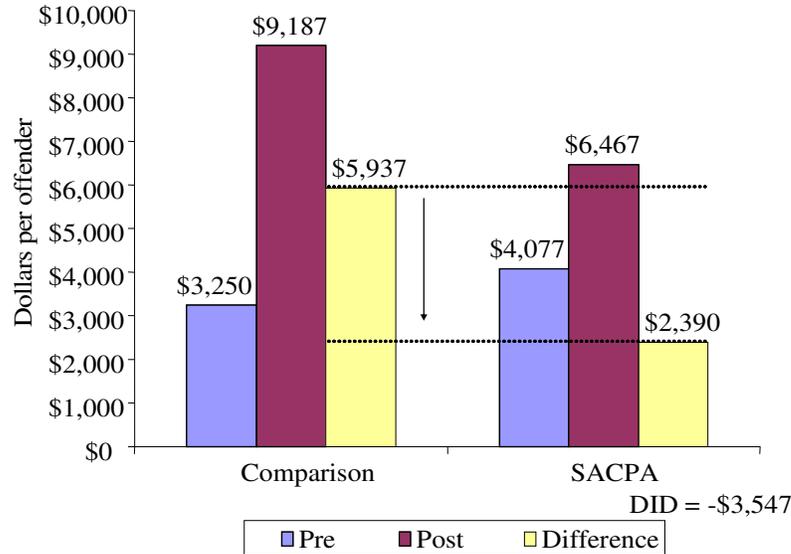
Prison costs are shown in Figure 1. Cost per offender increased by \$2,390 over a thirty-month baseline period for the SACPA group and by \$5,937 for the comparison group, which led to a DID prison-cost savings of \$3,547 during SACPA. This means that prison costs in California were \$3,547 lower per offender for the thirty-month followup period than what would have been expected had SACPA not been implemented. For the 61,609 offenders eligible for SACPA in its first year, the total savings to the state in prison costs were \$218.5 million.

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<sup>15</sup> Cost distributions were not normally distributed, so the average cost in each category was above the median cost due to a relatively small number of offenders with very-high-cost events (e.g., armed robbery). However, government pays such costs and using the average cost better captures their cost consequences.

<sup>16</sup> These are the covariance-adjusted values obtained by using multivariate regression techniques on offender characteristics and contextual trends in the larger society (see the Research Methods section). Totals and differences reported here may differ slightly from what a reader may compute from other reported numbers, due to rounding.

**Figure 1. Prison Costs**

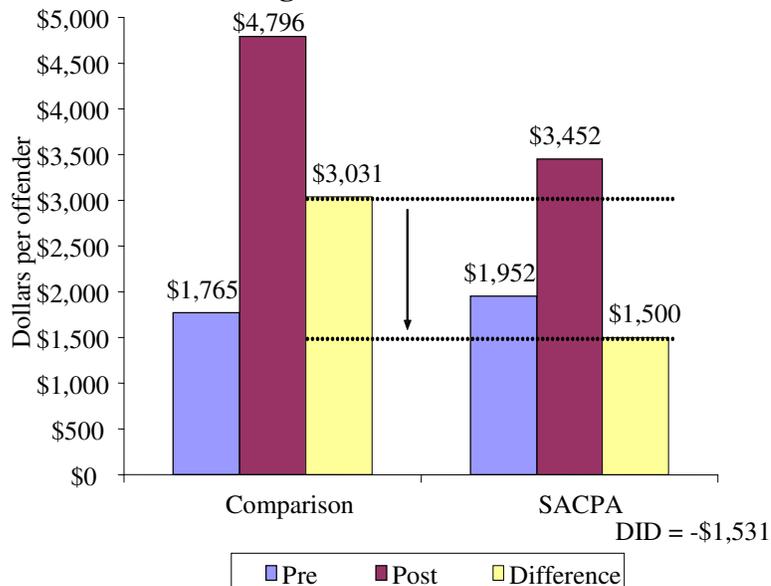


Notes: Data for number of days served in prison are from the Offender-Based Information System. Cost of a prison day (\$84.74) was obtained from the California Department of Corrections (2005). Because the number of prison days avoided by SACPA offenders exceeded a full census of a mid-size facility, the average cost of a prison day was used rather than the marginal cost.

*Jail*

Jail costs are shown in Figure 2. Cost per offender increased by \$1,500 over baseline during SACPA and by \$3,031 for the comparison group, a DID jail cost savings of \$1,531. This means that jail costs under SACPA were \$1,531 lower per offender during the thirty-month followup period than would have been expected in the absence of SACPA. Total savings in jail costs to counties for first-year SACPA offenders were \$94.3 million.

**Figure 2. Jail Costs**



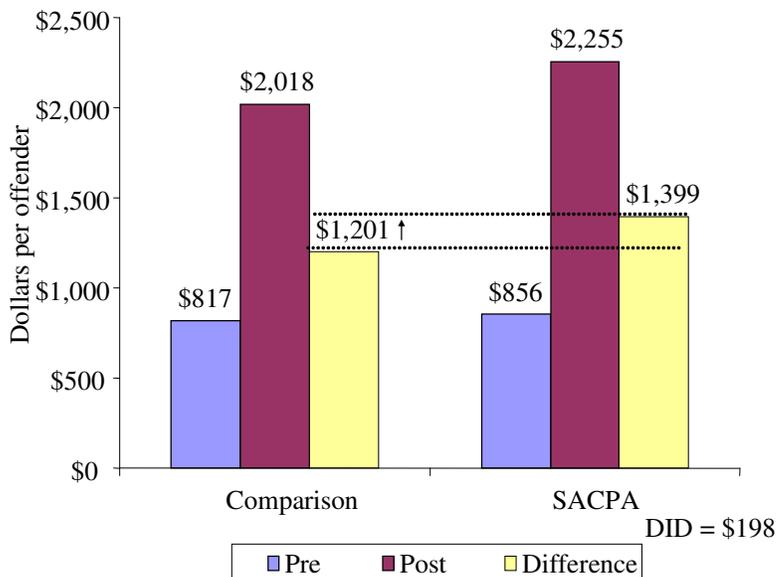
Notes: Data for number of days sentenced to jail are from the California Department of Justice Automated Criminal History System. The 2005 ADP County Survey was used to adjust to actual days served. Cost of a jail day by county was obtained from the County Survey and the 2003 California Board of Corrections Survey. Because the number of jail days avoided by SACPA

offenders exceeded a full census of a mid-size facility, the average cost of a jail day was used rather than the marginal cost.

*Probation*

The cost of probation supervision is shown in Figure 3. Cost per offender increased by \$1,399 over baseline during SACPA and by \$1,201 for the comparison group, which led to a DID probation supervision cost increase of \$198. This result means that probation costs under SACPA were \$198 higher per offender for the thirty-month period than would have been expected in the absence of SACPA. Total additional cost to the counties for probation was \$12.2 million.

**Figure 3. Probation Costs**

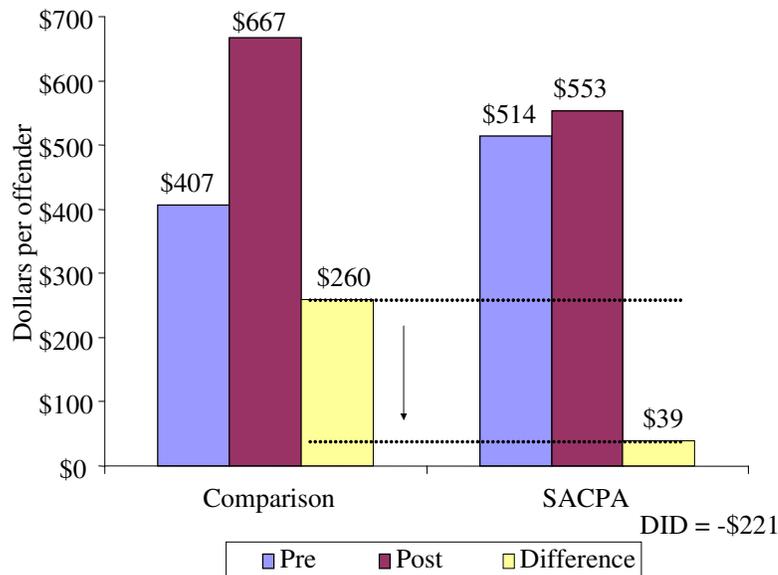


Notes: Data for number of days on probation is from sentencing records in the California Department of Justice Automated Criminal History System. Cost of a probation day was obtained by county from the 2005 ADP County Survey.

*Parole*

The cost of parole supervision is shown in Figure 4. Cost per offender increased by \$39 over baseline during SACPA and by \$260 for the comparison group, a DID parole supervision cost decrease of \$221. This means that parole costs under SACPA were \$221 lower per offender for the thirty-month period than what would have been expected in the absence of SACPA. This difference was expected, given the lower number of prison days (see Figure 1) served by SACPA offenders. Parole cost savings to the state under SACPA were \$13.6 million.

**Figure 4. Parole Costs**



Notes: Data for number of days on parole is from sentencing records in California Department of Justice Automated Criminal History System. Cost of a parole-day (\$9.21) is from the California Department of Corrections (2004).

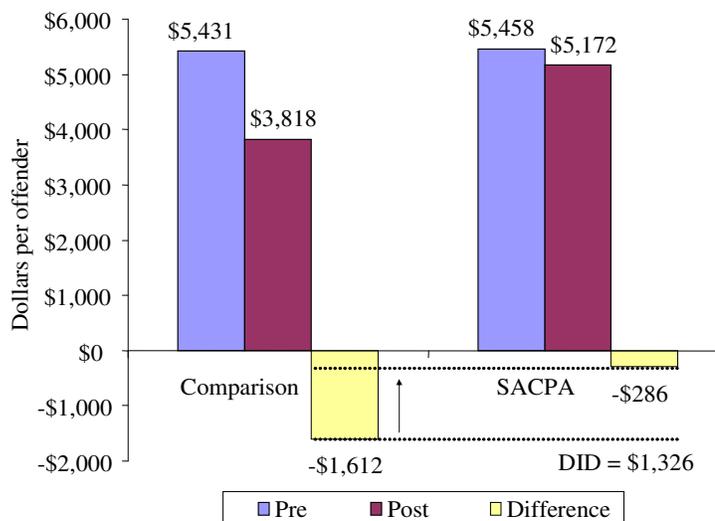
#### *Arrests and Convictions*

Arrest and conviction costs are shown in Figure 5. Although both costs declined for both groups in the followup period, they did not decrease by as much for the SACPA group. This was due in large part to the longer time that offenders in the comparison group were “off the street” during the followup period due to incarceration.<sup>17</sup> Since offenders who are incarcerated are unavailable to be re-arrested in the community, these differences in street time would be expected to reduce re-arrests and convictions to a greater degree in the comparison group than in the SACPA group.<sup>18</sup> Further analysis determined that a disproportionately large share of criminal-justice costs was created by 1.6 percent (N = 1010) of SACPA-eligible offenders. Costs for offenders in this subgroup were ten times (\$21,175) higher than those for the typical (median) offender (\$2,254) (see High-Cost Offender Sub-study for further details). Costs per offender decreased by \$286 relative to baseline levels during SACPA and by \$1,612 for the comparison group. DID arrest-and-conviction costs were \$1,326 higher for the thirty-month follow-up period than what would have been anticipated had SACPA not been implemented, resulting in a total increase of \$81.7 million in criminal-justice processing costs.

<sup>17</sup> In the thirty-month follow-up period, 71.2 percent of the comparison group had jail time compared with 58.9 percent of the SACPA group. Likewise, 28.2 percent served prison time compared with 23.3 percent for the SACPA group. The SACPA group also experienced shorter stays when incarcerated.

<sup>18</sup> Every judicial decision to place an offender on probation contains a degree of risk of re-offending in the community. This is also true when inmates are paroled. In general, any population of offenders under legal supervision has rates of re-offending that increase in proportion to time on the street. Many policy studies on the benefit-cost ratio of incapacitation (incarceration) have assessed the “balance point” between the high cost of incarceration and the greater risk of re-offending under lower-cost community supervision.

**Figure 5. Arrest and Conviction Costs**

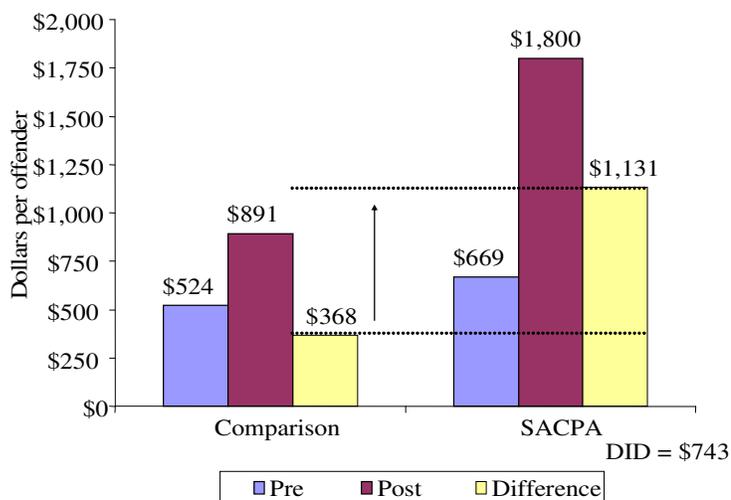


Notes: Numbers of arrests and convictions are from sentencing records in the California Department of Justice Automated Criminal History System. Costs for crime were adjusted from Miller and Cohen (1996) and French et al. (2006).

**Drug Treatment**

Drug-treatment costs are shown in Figure 6. Cost per offender increased by \$1,131 over baseline for the SACPA group and by \$368 for the comparison group, a DID increase of \$743 per offender, resulting in \$45.8 million more in treatment costs than what would have been anticipated had SACPA not been implemented.

**Figure 6. Drug-Treatment Costs**

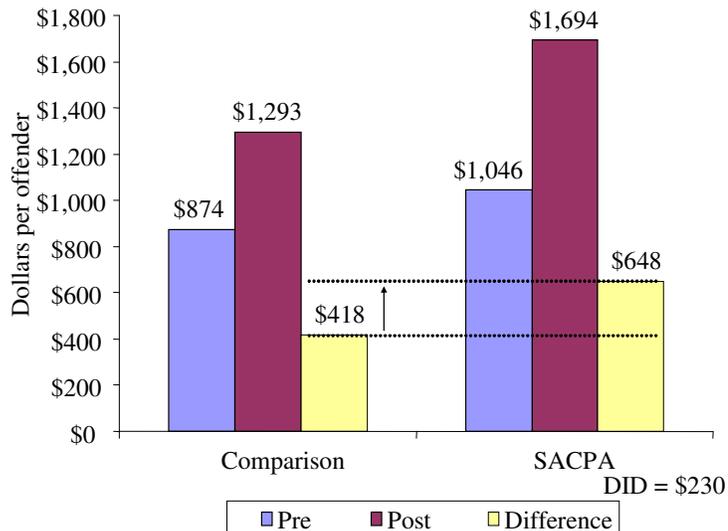


Notes: Data for number of days in drug treatment, by modality, are from the California Alcohol and Drug Data System (CADDs). Per-diem treatment costs are from Etnner et al. (2005) adjusted to 2004 dollars.

**Healthcare**

Healthcare costs are shown in Figure 7. Greater access to drug treatment was associated with a greater utilization of healthcare (see also Study 2). Costs per offender increased by \$648 for the SACPA group and by \$418 for the comparison group. Such costs were \$230 higher per offender for the 30-month follow-up period than would have been anticipated had SACPA not been implemented. Healthcare costs to the state increased by \$14.2 million under SACPA.

**Figure 7. Healthcare Costs**

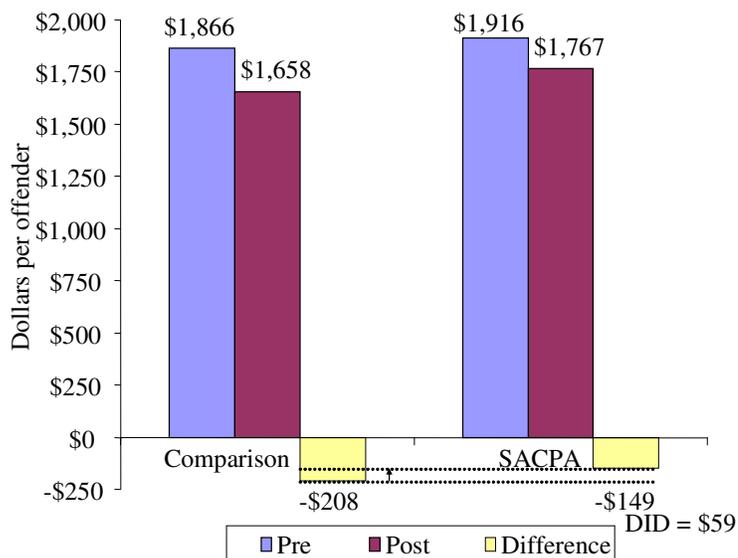


Notes: Data for health costs are from DHS Medi-Cal/Medicaid files.

*Income and Sales Tax*

Tax receipts are shown in Figure 8. Tax receipts declined by \$149 for the SACPA group and by \$208 for the comparison group. This resulted in a DID increase in taxes collected under SACPA of \$59. An additional \$3.6 million was received by the state and county governments for taxes paid on income and purchases compared with what would have been anticipated had SACPA not been implemented.

**Figure 8. Taxes Paid**



Notes: Data on earnings were obtained from EDD. Taxes were computed using California tax tables and were adjusted to 2004 dollars. Values reported reflect estimates of income taxes and sales taxes paid.

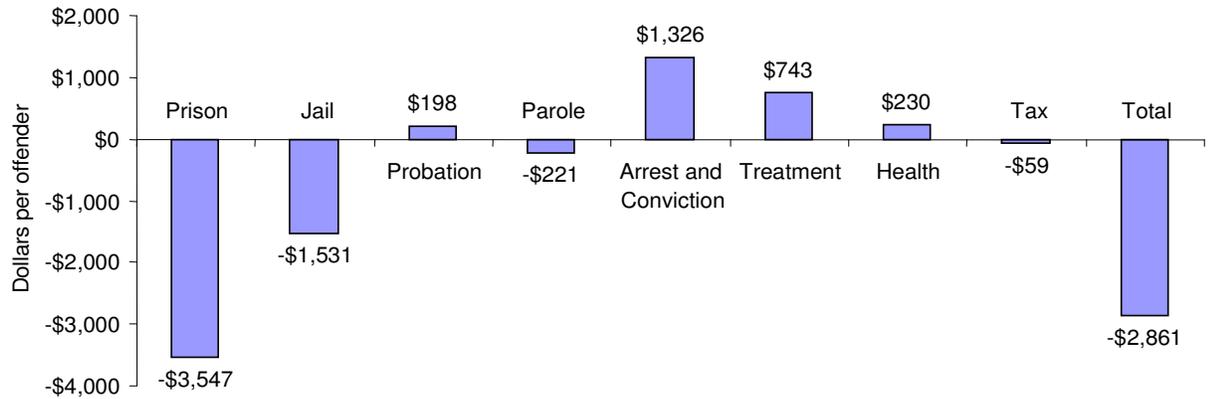
In both groups, earnings fell immediately in the first quarter following the eligible conviction but increased in the quarters that followed. For the comparison group, the reduced earnings can be explained by increased incarceration and, therefore, fewer days

available for work. For the SACPA group, the initial reduction in earnings is attributed to offenders being in treatment.

*SACPA Overall Cost-Offsets*

Figure 9 shows a summary of SACPA DID costs over all areas examined. The zero line can be interpreted as cost neutral. Bars above the line represent cost increases and bars below the line represents cost savings. There was a total DID cost savings of \$2,861 per offender under SACPA over the thirty-month followup period,<sup>19</sup> resulting in a total cost savings to government of \$173.3 million.

**Figure 9. DID Cost Summary for Study 1**



Study 1 allowed the calculation of a total DID cost for the population of 61,609 offenders in SACPA’s first year. Before turning to the calculation of the benefit-cost ratio, it must be noted that the initial year required a massive ramp-up effort by the involved county systems. The expansion of existing provider contracts and the development and awarding of new contracts was, in many cases, a lengthy process. In addition, during this year, state and county governments were coping with the overall budget constraints of a faltering economy. In some counties, non-recurring funds were used in ways that allowed savings to accrue to the allocated SACPA funds. These savings could then be carried forward into future years. In the first year of the study, 55 of the 58 counties reported<sup>20</sup> a total expenditure of SACPA funds of about \$85 million, an amount less than actually spent. Using this figure would have produced a spuriously high benefit-cost ratio for the first year. Accordingly, UCLA used an estimate of SACPA operation costs (\$120 million less \$3 million used for state administrative costs) as a conservative estimate of expenditures (a figure that stabilized in the subsequent years of SACPA).

To determine the benefit-cost ratio per offender for the first year, total costs over the thirty-month period (expressed as a negative number, which represents savings) are multiplied by the total number of offenders convicted of a SACPA-eligible offense during the first year of SACPA (N = 61,609).<sup>21</sup> From this total, the \$117 million actually

<sup>19</sup> Most of these savings accrued in the first 12 months of this period, although savings continued to accrue over the remaining 18 months of the 30-month period. See results of Study 3.

<sup>20</sup> Figures cited are from the SACPA Reporting Information System (SRIS).

<sup>21</sup> Earlier UCLA reports estimated the number of eligible offenders from the Stakeholder Survey for the first year and from the SACPA Reporting Information System (SRIS) for the second (reported by county

allocated for programmatic costs is subtracted to avoid “double counting” costs that had already been paid for via SACPA expenditures (\$120 million less the \$3 million used in SACPA administration). The resulting sum is divided by the \$120 million allocated for first-year SACPA costs. In brief, the benefit-cost ratio reported is the total savings net of programmatic costs derived from SACPA, divided by the \$120 million allocation.<sup>22</sup>

For Study 1, UCLA estimated a benefit-cost ratio of 2.44:1, meaning that nearly \$2.50 was saved under SACPA for every \$1 allocated to fund the program.

### **SACPA Drug-Treatment-Participation Cost Ratios (Study 2)**

Prior UCLA reports (see Footnote 1) indicated that, in SACPA’s first and second years, 85 percent of offenders who accepted it reported for assessment. Of these, almost equal percentages entered drug treatment, 69 percent and 71 percent respectively. Of those entering treatment, 34 percent in each year completed their required treatment, as reported to the statewide database on drug-treatment admissions and discharges. As noted in the earlier reports, these show and completion rates conform to the general literature on the treatment of substance-abusing offenders.

Study 2 examined variation in cost ratios in relation to level of SACPA participation. The study was based on the population of adults (eighteen or older) who, during SACPA’s initial year (July 1, 2001 to June 30, 2002), participated in SACPA—that is, those who *accepted* a SACPA referral. The population was broken into three groups: (1) offenders who were referred to SACPA but did not enter drug treatment, (2) offenders who entered but did not complete treatment, and (3) offenders who completed treatment. Like the first study, this second study covered thirty-month pre- and post- periods beginning with the date of each offender’s conviction. Figure 10 provides a summary of cost offsets by treatment status. The zero line is interpreted as cost neutral. Bars above the line represent cost increases and bars below the line represent cost savings.

#### *Prison*

Drug-treatment participation was strongly associated with reductions in incarceration costs relative to the comparison group costs. Prison costs were \$2,459 lower for offenders who never entered treatment, \$4,058 lower for individuals who entered but did not complete treatment, and \$6,175 lower for offenders who completed treatment, than what would have been expected had SACPA not been implemented.

#### *Jail*

Jail costs were \$1,411 lower for offenders who never entered drug treatment, \$1,822 lower for individuals who entered but did not complete treatment, and \$2,372 lower for offenders who completed treatment.

#### *Probation*

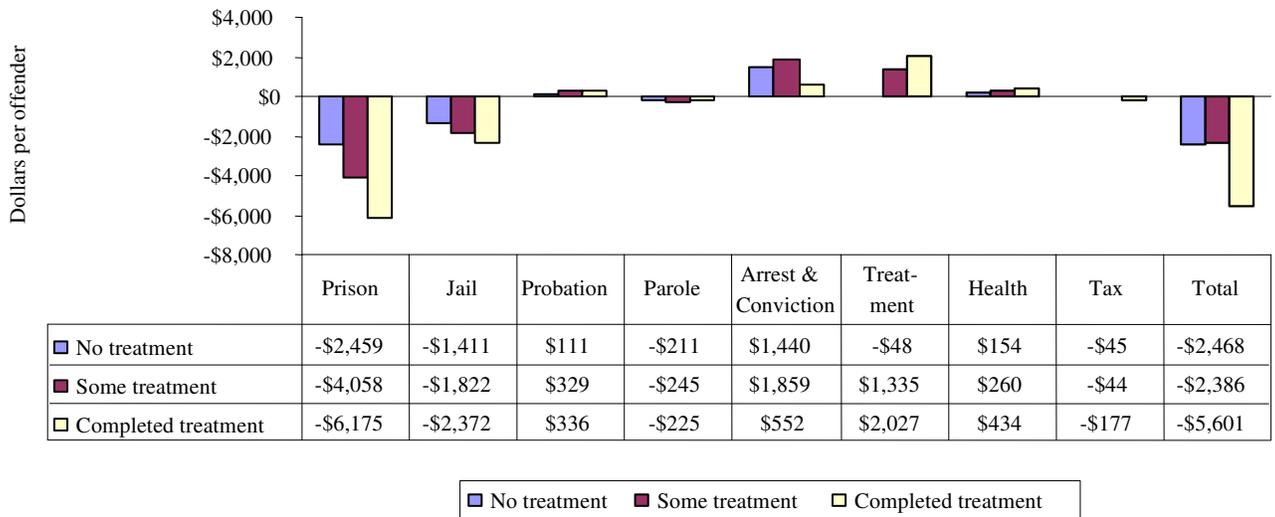
Probation costs were \$111 higher for offenders who never entered drug treatment, \$329 higher for individuals who entered but did not complete treatment, and \$336 higher for offenders who completed treatment.

### **Figure 10. DID Cost Summary by Drug-Treatment Status**

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lead agencies). The cost analysis improved on these estimates by using California Department of Justice official records.

<sup>22</sup> SACPA programmatic costs are first subtracted from the numerator to avoid double counting of costs. The savings ratio is:  $\text{Ratio} = ((S * N) - P)/A$ ; where S = average savings per offender expressed as a negative amount; N = number of SACPA eligibles; P = programmatic costs; A = SACPA allocation.



*Parole*

Parole costs were \$211 lower for offenders who never entered drug treatment, \$245 lower for individuals who entered but did not complete treatment, and \$225 lower for offenders who completed treatment. Note that there is little variation from the full SACPA population reduction in parole costs, at \$221 per offender, reported in Study 1 (see Figure 4).

*Arrests and Convictions*

Arrest and conviction costs were \$1,440 higher for offenders who never entered drug treatment, \$1,859 higher for individuals who entered but did not complete drug treatment, and \$552 higher for offenders who completed treatment. UCLA found that SACPA offenders who did not report for treatment were mainly of two types: offenders with low or no prior arrests and convictions and offenders with many prior arrests and convictions. The former group may have felt themselves to be only recreational users and believed they did not require treatment. The latter group may have chosen not to participate in treatment in the belief that sanctions from the criminal-justice system were too unlikely or too distant to hold them accountable.

*Drug treatment*

As expected, drug treatment costs were higher depending on level of participation. Treatment costs were \$1,335 higher for those who entered but did not complete treatment and \$2,027 higher for those who completed treatment. Those who did not enter treatment had a \$48 lower treatment cost.

*Healthcare*

Individuals in treatment are more likely to seek out care for other health needs. State-funded healthcare costs were \$154 higher for offenders who never entered treatment, \$260 higher for individuals who entered but did not complete treatment, and \$434 higher for offenders who completed treatment.

*Taxes Paid*

There was a slight increase in tax revenues collected related to drug-treatment participation under SACPA. Tax revenues were \$45 higher for offenders who never entered treatment, \$44 higher for those who did not complete treatment, and \$177 higher for those who completed treatment.

### *Total Cost Offset by Drug-Treatment Status*

Total costs saved were \$2,468 for offenders who were referred to SACPA but never entered drug treatment, \$2,386 for individuals who did not complete treatment, and \$5,601 for offenders who completed treatment. Treatment and new arrests and convictions costs constituted a major part of cost increases, whereas total costs savings were driven largely by savings in incarceration (jail and prison) costs. While incarceration costs were reduced under SACPA for those never treated, these savings were offset by higher arrest and conviction costs in the post-period for this group. Incarceration savings were even higher for the some-treatment group, but were offset by an increase in arrest and conviction costs and in higher treatment costs.

### *Cost Comparison*

Average cost savings per offender were more than twice as high for those who completed drug treatment compared with those who never entered or did not complete treatment. For treatment completers, the cost savings reflect a benefit-cost ratio of about 4:1, meaning that approximately \$4 was saved under SACPA for every \$1 allocated to a treatment completer. Two methods were applied for sensitivity analysis of this result; one resulted in a ratio of 3.9:1, the other 3.8:1. Notably, although SACPA offenders who received some treatment showed reductions in prison and jail time over those who did not enter treatment, these savings were offset by treatment costs and somewhat higher rates for arrests and convictions in the followup period. When only criminal-justice costs were considered, the cost savings were as expected: no drug treatment, least; some treatment, intermediate; and completed treatment, most.

### **SACPA Second Year Replication (Study 3)**

Study 3 examined costs in SACPA's first and second years and compared costs in each of those years to the \$120 million annual allocation. Here, costs in SACPA's first year were based on the first-year SACPA-eligible population (N = 61,609), but the baseline and follow-up periods were restricted to 12 months. Costs in SACPA's second year were based on the second-year SACPA-eligible population (N = 68,883) and baseline and followup periods of twelve months.

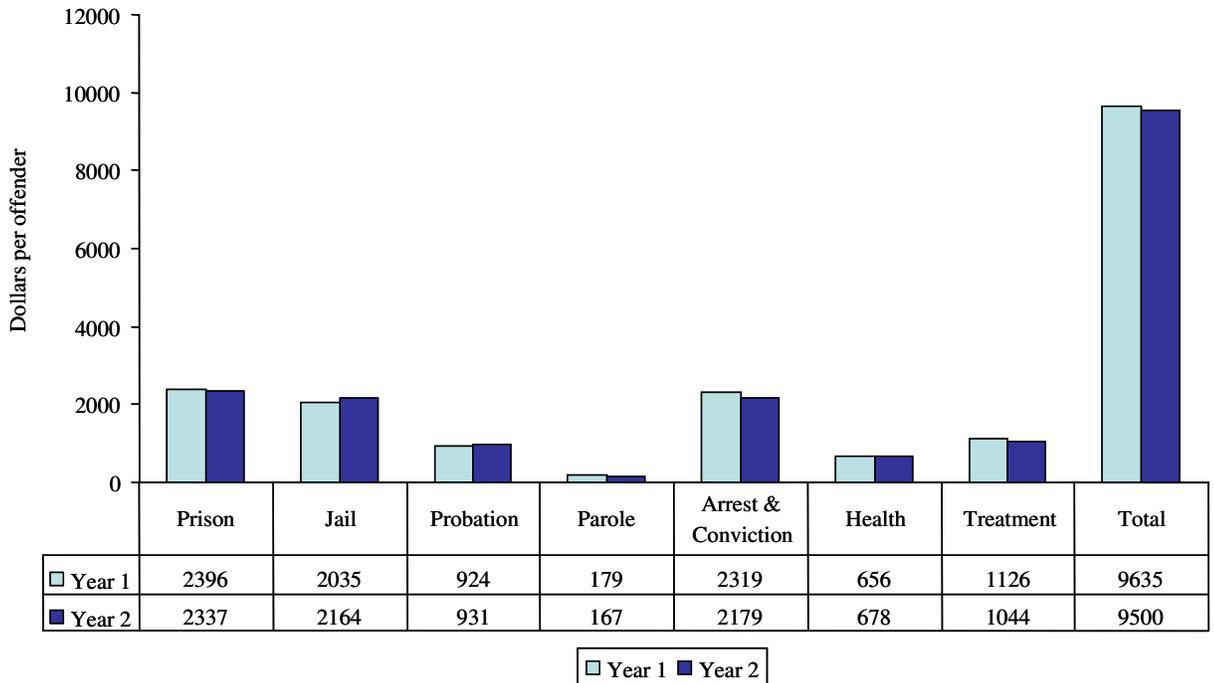
Figure 11 provides a summary of costs per offender *during the twelve-month followup* of the first two SACPA years. UCLA found a slight decline (1.5%) in the total cost per offender in the post-period in the second year of SACPA. This decrease was largely attributable to a 6 percent decrease in arrest and conviction costs for offenders during SACPA's second year.

The estimates for first-year and second-year SACPA offenders are not directly comparable. The comparison group and the first-year SACPA offenders both experienced pre-periods with no SACPA policy in effect. However, the second-year SACPA offenders have a pre-period *during* the SACPA era. Nonetheless, the findings in Figure 11 show that average offender costs were very similar across the two years when restricted to equal periods for both years.

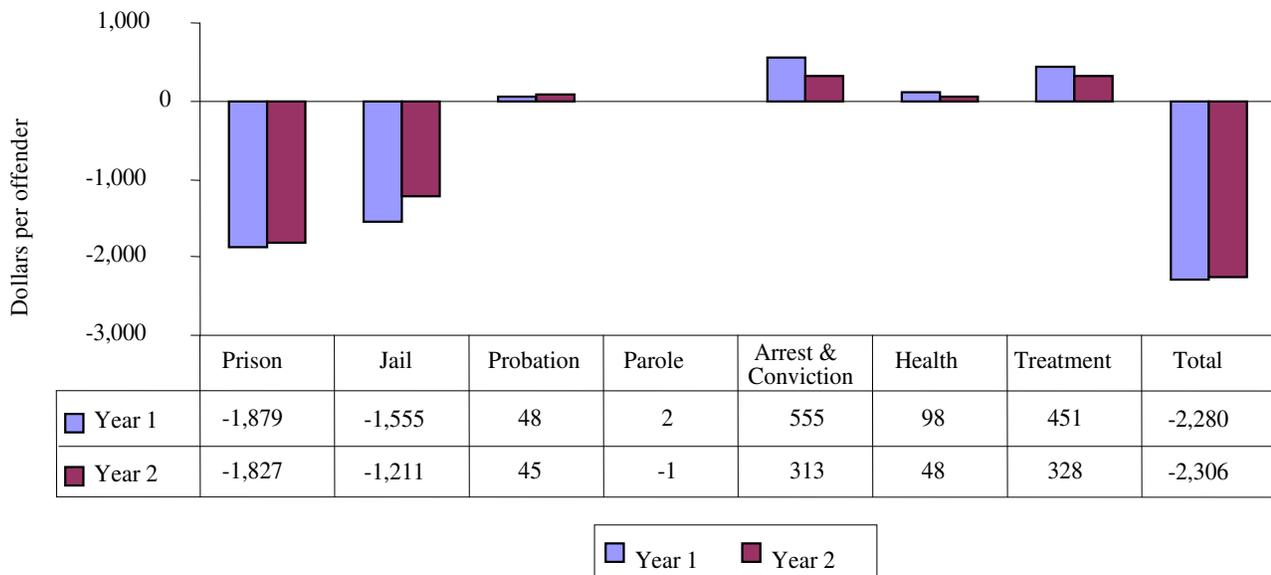
The DID estimates are provided in Figure 12. The zero line is interpreted as cost neutral. Bars above the line represent cost increases and bars below the line represent cost savings. Figure 12 is not directly comparable with Figure 9, which captured a thirty-month period. Overall cost savings in both years were nearly identical at \$2,300 per offender. The higher number of offenders who were identified as SACPA eligible in the second year (N = 68,883), as opposed to the first year (N = 61,609), meant somewhat

greater total savings to government (\$158.8 million) in SACPA’s second year than in its first year (\$140.5 million). The benefit-cost ratio for the first year was 2.2 to 1, meaning that \$2.20 was saved by government for each dollar spent on SACPA, and 2.3 to 1 for the second year, meaning an additional \$0.10 was saved for each dollar spent. (However, this slight increase in the benefit-cost ratio cannot be considered a trend; more years of cost data would be necessary to define any such changes as a trend.)

**Figure 11: Summary of Post-SACPA Costs for Year 1 and Year 2 Offenders<sup>23</sup>**



**Figure 12. DID Cost Summary by SACPA Year**

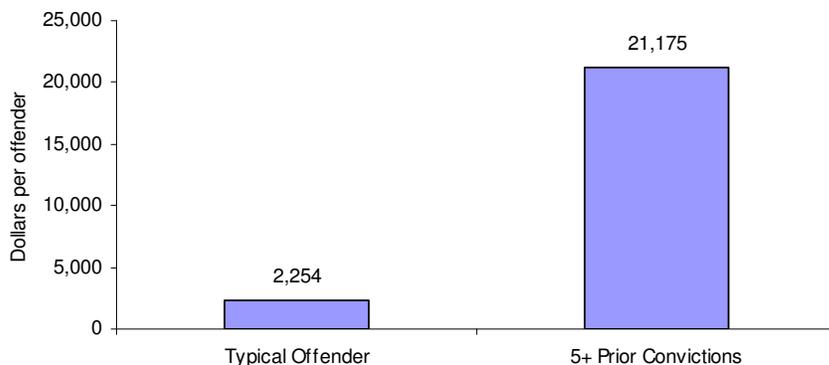


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### High-Cost Offender Sub-Study

In examining factors that contribute to costs, UCLA found that a small percentage of SACPA-eligible offenders contributed a disproportionate share of criminal justice costs. As the number of prior convictions increased, criminal-justice costs in the thirty-month followup period also increased for prison, jail, and arrests and convictions. This was true for both the comparison and SACPA groups. The greatest increase in costs occurred between the group with four or fewer prior convictions and those with five or more. UCLA chose this “break point” for group classification. Those with five or more convictions in the thirty-month period before their SACPA-eligible convictions, constituting 1.6 percent (N = 1,010) of the SACPA group, had post-conviction crime costs in the thirty-month followup period ten times higher than the typical, or median, SACPA offender: \$21,175 versus \$2,254, respectively. Figure 13 depicts this difference.

**Figure 13. Relative Costs for High-Rate Offenders (1.6%, N = 1,010)**



### Adult-Welfare Sub-Study

Statewide welfare data were made available to UCLA from the California Department of Social Services. The welfare system changed dramatically over the period of the evaluation, in eligibility, benefits, and duration. Welfare caseloads declined rapidly after 1996. The average annual caseload fell by more than ten percent per year between 1997 and 2000. The caseload decline began slowing around 2000 (6.7% decrease in 2001 and 2.2% decrease in 2002).<sup>24</sup>

Such changes limited UCLA’s use of this data, especially as the effects of welfare reform made the data unamenable to identifying effects attributable to SACPA. Analysis of the available data revealed that only about ten to thirteen percent of each group (comparison and SACPA) could be identified as having received welfare in either the thirty-month baseline or followup periods. The change from baseline to followup periods in the comparison group showed a 25.6 percent drop in recipients and a 38 percent reduction in benefit time. For SACPA, there was a 38.2 percent drop in recipients and a 26 percent

<sup>24</sup> California Department of Social Services, 2004.

duration reduction. There is no practical analytic method to separate the known effects of welfare reform from the potential effects of SACPA.

## CONCLUSIONS AND RECOMMENDATIONS<sup>25</sup>

### Introduction

The conclusions and recommendations of the UCLA evaluation of SACPA are presented in this section.<sup>26</sup> Three major conclusions can be drawn from the UCLA evaluation of SACPA: (1) SACPA substantially reduced incarceration costs; (2) SACPA resulted in greater cost savings for some offenders than for others; and (3) SACPA can be improved. From these conclusions, specific recommendations are drawn. Each recommendation encompasses goals that require attention at many levels, including statewide collaboration and coordination, offender eligibility and alternative strategies for high-cost offenders, systems integration, criminal justice, drug treatment, and strategic planning.

### **Conclusion 1: SACPA substantially reduced incarceration costs.**

Based on costs incurred by offenders who were eligible for SACPA participation during its first year of implementation, SACPA's overall benefit-cost ratio was nearly 2.5 to 1 over the thirty-month follow-up period, resulting in \$173.3 million in net savings to the state and local governments. Over a twelve-month followup period, SACPA's overall benefit-cost ratio was 2.1 to 1 in its first year and 2.3 to 1 in its second year.

*Recommendation 1.1:* From the state- and local-government perspectives, continued funding of SACPA is justified.

*Recommendation 1.2:* ADP should have statutory authority and responsibility to develop a strategic plan for the ongoing operation and continual improvement of SACPA. Attendant evaluation should encompass continuous and timely feedback processes to stakeholders, the Governor's Office, and the Legislature.

### **Conclusion 2: SACPA results in greater cost savings for some eligible offenders than for others.**

In particular, drug-treatment completers had a benefit-to-cost ratio of 4 to 1, a savings of \$5,601 per offender. In addition, UCLA found that the typical SACPA offender (the median offender in the cost distribution) had no convictions in the thirty months following their SACPA-eligible conviction. In contrast, offenders with five or more convictions in the thirty-month period prior to their SACPA-eligible conviction produced costs ten times higher than those of the typical offender.

*Recommendation 2.1:* SACPA criteria should be modified so that offenders with high rates of prior non-drug convictions (e.g., five or more prior convictions during the prior three years) would be placed into more-controlled settings, including, but not limited to, residential treatment or prison- or jail-based treatment programs.

*Recommendation 2.2:* Eligible offenders with high drug severity (e.g., histories of serious or lengthy use) should receive greater criminal-justice supervision (e.g., drug-court management) and more intense drug-treatment services (e.g., residential or day treatment).

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<sup>25</sup> Additional, more-detailed recommendations with suggestions for resources and mechanisms of action are contained in Appendix B.

<sup>26</sup> The evaluation of SACPA required a diverse and detailed methodological approach. UCLA made extensive use of administrative databases on criminal history, substance-abuse treatment, healthcare, and employment outcomes. In addition, throughout the evaluation, UCLA sought the expert counsel of the Evaluation Advisory Group (EAG), the views of the Statewide Advisory Group (SAG) and the County Alcohol and Drug Program Administrators Association of California (CADPAAC), and the input of the Department of Alcohol and Drug Programs (ADP).

### **Conclusion 3: SACPA can be improved.**

UCLA found that assessment rates were better in counties where assessment units or centers were located in or near the court, where offenders were allowed more days to report for assessment, and where assessment and treatment placement occurred in a single visit. Further, assessment and treatment “show” rates were higher in counties using one or more drug-court procedures. At the drug-treatment level, residential and methadone modalities were underutilized for high-drug-severity and opiate-dependent offenders.<sup>27</sup> Finally, outcomes were best for SACPA-treatment completers.

*Recommendation 3.1:* Based on client assessments and research findings on successful strategies, greater resources should be dedicated to increasing treatment engagement, retention, and completion (also see Recommendation 2.2).

*Recommendation 3.2:* Resources should be allocated to ensure suitable and most-favorable drug-treatment options locally. This may require capacity expansion, more-efficient location and greater use of residential services, and greater use of narcotic-substitution therapy.

*Recommendation 3.3:* Collaboration and coordination among court, probation, parole, and drug-treatment systems should continue to be improved with the goal of admitting offenders into appropriate treatment in the shortest possible time, as well as maintaining appropriate levels of oversight and supervision.

*Recommendation 3.4:* Incentives should be considered for providers who demonstrate more success in drug-treatment engagement, retention, and completion for SACPA clients.

*Recommendation 3.5:* A greater use of both probation and community program drug testing information to determine additional services or intermediate sanctions of increasing severity for problematic or recalcitrant offenders. Such sanctions could include initially short jail stays that lengthen with each successive violation.<sup>28</sup>

Several additional issues merit close attention. First, insufficient consideration was given to implementing drug treatment “aftercare” or “continuity of care” in SACPA. Proven models for continuing care should be communicated to drug-treatment providers for incorporation into their clinical process. Second, with Proposition 63<sup>29</sup> funding now established, consideration should be given to applying some of these funds to services for SACPA offenders with co-occurring mental health disorders. Third, the use of administrative databases has proven essential and productive in evaluating SACPA and other statewide policies. A concerted, collaborative effort should be made to streamline access to, and use of, centralized state data for authorized policy and evaluation studies. Finally, further policy-relevant sub-studies on accumulated and new SACPA data should be conducted to complement findings from the cost analysis.

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<sup>27</sup> Limitations in the use of these two treatment modalities may have been constrained by county-level slot or funding restrictions.

<sup>28</sup> The effectiveness of short jail stays has not been firmly established in the research literature. Contextual conditions of sanction application, timing, and perceived fairness require careful consideration of optimal options.

<sup>29</sup> California voters approved Proposition 63, the California Mental Health Services Act, to provide additional funding for mental health services. Funds became available to the counties in January 2006.

## RESEARCH METHODS

Common economic-analytic issues and several research issues were addressed in the methodology used for the SACPA cost analysis. These included design, data, analytic, and other aspects that were resolved on the basis of common econometric practice, logic, or empirical assessment. A detailed discussion is presented below.

### Design

The SACPA evaluation is one of a few studies of major policy change involving drug treatment in which a time-lagged<sup>30</sup> comparison group was constructed, allowing for greater precision and credibility in the findings than the more typical single-group, pre- to post-intervention assessment. One disadvantage of a time-lagged comparison group is the possibility that time-related events, in addition to the intervention, might differ across the two periods under study. To compensate for this possibility, measured differences between the comparison and SACPA groups and time trends in important variables (e.g., strength of the economy and national crime trends) were statistically controlled in the analyses using covariate adjustments.<sup>31</sup> Moreover, as noted earlier, the SACPA evaluation relied on administrative records as data sources (which are more objective than client self-reports), and on a more extended baseline and followup period of observation. Overall, these improvements in design, analytic procedures, and data sources lend additional credibility to the findings over other cost-determination approaches. The three studies were designed to answer the research questions enumerated in the request for evaluation proposals, as amended by suggestions from UCLA Integrated Substance Abuse Programs (ISAP) staff and consultants. In addition, later adjustments were made based on the cumulative suggestions by the SACPA Statewide Advisory Group and the SACPA Evaluation Advisory Group. The final set of research questions related to costs is specified in Appendix A.

This section describes the comparison group adopted in the cost analysis and explains the rationale for analytic time frames. Steps taken to identify SACPA's cost as precisely as possible are explained, as are the cost sources and issues addressed over the course of the analysis.

### Comparison Groups

The evaluation's three cost studies served different purposes. UCLA employed comparison groups and time periods as appropriate to each purpose.

#### *Study 1: SACPA as a Policy*

Study 1 compared (1) offenders eligible for SACPA and (2) a before-SACPA-implementation group of offenders who *would have* been eligible for SACPA. The purpose of this study was to calculate the cost attributable to SACPA as a policy. Findings cover thirty-month periods before and after the date of each offender's conviction.

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<sup>30</sup> Although the two groups were similar in SACPA-eligible conviction and in offender characteristics, the fact that the comparison group was derived from a period before SACPA was implemented requires the "time-lagged" qualifier.

<sup>31</sup> "Covariate adjustments" here refers to a standard statistical procedure that allows us to adjust for imbalances in baseline variables that may be related to the outcomes under consideration. The adjustments help correct for potential differences in the groups' predispositions that may cause them to behave differently from the outset, for example, the effect of differences in the economic climate on the groups' access to employment opportunities.

The SACPA-era group was the population of adults (eighteen or older) who were, during SACPA's first year (July 1, 2001 to June 30, 2002), convicted<sup>32</sup> of a SACPA-eligible offense with no concurrent offense or other circumstance that should have made them ineligible. SACPA eligibility is determined at sentencing and depends on the nature of the offense(s) for which a conviction is entered. Thus, convictions provided the best indicator of eligibility for SACPA. The term "SACPA-era" is used because, since the law had statewide applicability, all offenders convicted of a SACPA-eligible offense were included in the population, whether they actually participated in SACPA or not.

A time-lagged comparison group was drawn from the period before SACPA was enacted. The comparison group consisted of adults convicted of an offense for which they *would have* been SACPA-eligible with no concurrent offense or other circumstance that should have made them ineligible. This population consisted of offenders convicted between January 1, 1997 and June 30, 1998. The thirty-month followup period for each comparison offender therefore ended on or before December 31, 2000. The before-SACPA period is as close to the SACPA years as possible, which minimized the chance that broader trends in drug use, law-enforcement patterns, or other factors might have influenced findings, and the followup period for that population ended in advance of any change in criminal-justice practice that might have occurred in anticipation of SACPA implementation on July 1, 2001.

The cost study of SACPA as a policy is important because SACPA is a voluntary program; persons convicted of a SACPA-eligible offense may accept or decline the opportunity to be sentenced under SACPA. The voluntary nature of SACPA participation opened the possibility that offenders who accepted SACPA might be different in ways that could affect their costs. In program evaluation, this problem is known as "self-selection bias." To avoid such bias, the program group must be constructed from *all* those eligible for the program, whether or not they self selected into it. In the case of SACPA, the prior event closest to an offender's decision to accept or decline SACPA is conviction on a SACPA-eligible offense (or, for the comparison group, conviction on an offense for which they *would have* been SACPA eligible). Additional steps to ensure comparability of the SACPA-era and comparison groups are described in the Causal Inferences section.

#### *Study 2: Degree of SACPA Participation*

The purpose of Study 2 was to determine how cost ratios varied in relation to offenders' degree of participation in SACPA. The study of variation in cost ratios in relation to SACPA participation was based on the population of adults (eighteen or older) who,

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<sup>32</sup> An alternative indicator of SACPA eligibility is arrest, rather than conviction. This alternative was considered because the conviction is "farther from the crime" than the arrest. That is, convictions reflect not only the arrest itself but also the post-arrest behavior of actors in the criminal-justice system (e.g., the decision to file charges and the parameters of plea bargaining) and of offenders (e.g., acceptance of a plea bargain that renders the offender eligible or ineligible for SACPA). In addition, data on convictions (dispositions) were missing for 30 to 40 percent of SACPA-era and comparison offenders arrested for SACPA-eligible offenses, indicating a possibility that adjudication did not proceed after the arrest. On the other hand, a majority of offenders (66%) arrested for an eligible offense in SACPA's first year did not participate in SACPA, and an unknown portion of them may have been ineligible for SACPA at sentencing. Compared with convictions data, arrests data may therefore provide a much weaker indication of SACPA's cost. There is no empirical basis at present for resolving these considerations. The decision to use convictions as the indicator of SACPA eligibility was, therefore, made on logical grounds—namely, SACPA eligibility is determined upon conviction, not arrest.

during SACPA's initial year (July 1, 2001 to June 30, 2002), participated in SACPA—that is, those who *accepted a SACPA referral*. This population was identified based on three sources: (1) a disposition in the criminal justice record indicating that the offender was referred to SACPA upon conviction, (2) a SACPA-referred admission noted in the California Alcohol and Drug Data System (CADDs), and (3) county records indicating SACPA participation. The population was divided into three groups: (1) offenders who were referred to SACPA but did not enter drug treatment, (2) offenders who entered but did not complete treatment, and (3) offenders who completed treatment. Compared to the more traditional drug treatment evaluation study based on a single-group design, as was the case in CalDATA and CalTOP (see Footnote 9), this comparison was more precise since the source of data was official records and the baseline and followup periods were lengthy.

Like Study 1, Study 2 covered thirty-month baseline and followup periods beginning with the date of each offender's conviction.

### *Study 3: Replication of SACPA Outcomes*

Study 3 reported costs in SACPA's first and second years and compared them with the \$120 million annual allocation. Costs in SACPA's first year were again based on the first-year SACPA population, defined on the basis of referral to SACPA (as in Study 1), but the followup period was restricted to twelve months. Costs in SACPA's second year were based on second-year SACPA-eligible offenders and used an equivalent followup period of twelve months. A twelve-month cutoff sacrificed the advantages of longer followup (see the Rationale for Analytic Time Frames section) but created an opportunity for replication across the first- and second-year populations. Given data-reporting lags and the timetable for evaluation reporting, it was not possible to construct a followup period longer than twelve months for the second-year population.

Replication indicated the extent to which SACPA costs were similar across the two years and aided in interpreting findings from the other two studies. Specifically, it answers the question: Do the second year findings suggest that costs in the first year were in any way atypical?

### *Sub-Studies: High-Cost Offenders and Welfare*

Two issues emerged in the overall cost analysis that merited further attention. One explored that group of SACPA-eligible offenders who contributed disproportionately to costs in the thirty-month followup period (see Findings). The second issue arose from welfare payments to SACPA-eligible offenders. Here the impact of welfare reform during the SACPA evaluation period created such shifts in the data that a valid DID cost assessment could not be conducted. However, descriptive information about the welfare status of the samples is provided in Findings.

### **Rationale for Analytic Time Frames**

A followup period of thirty months had two important advantages. First, twenty-three percent of offenders in the comparison group and nine percent of SACPA-era offenders were sentenced to jail or prison due to their SACPA-eligible conviction. This difference reflects one key aspect of the policy change being evaluated. That is, offenders who would have been eligible for community supervision and drug treatment after SACPA was implemented were, in the years before SACPA, more likely to be incarcerated. Median time served in jail was 2.5 months and median prison time was 12.9 months for offenders in the comparison group. During in-custody months, there were incarceration

costs (which include the costs of custody, healthcare, and other services delivered in jail or prison) but no other costs. In particular, while incarcerated, offenders had no opportunity to commit new offenses in the community. This fact was important in Study 1 because re-offending was a contributor to total costs. Over a followup period of thirty months, however, the typical comparison offender who began the period in jail or prison will have been back “on the street” for seventeen months or more and will therefore have had time in which to re-offend. Assessment of costs under SACPA was, therefore, more complete with a thirty-month followup period than would have been possible in a shorter period.

Second, SACPA may show elevated costs of healthcare and social services over the first few months of an individual’s participation in a drug-treatment program as he or she finally begins to receive long-needed services that are potentially important to recovery. In a followup period as long as thirty months, the effects of any short-term “blip” in service access will have receded. Coverage of costs under SACPA and before SACPA implementation was therefore more reliable in a thirty-month follow-up period than would have been possible in a shorter period.

With a twelve-month follow-up, Study 3 was more limited in its coverage in that potential costs (or savings) beyond this period could not be considered during the evaluation time frame. For this reason, major conclusions about the total cost and cost ratios were based on Study 1 and Study 2. Study 3 still has value in showing whether costs were similar across years. Importantly, if benefit-cost ratios are similar across the two years, the findings show the stability of cost outcomes.

### **Causal Inference**

Even with the small interval between the SACPA and comparison groups a time-lagged comparison group retains some analytic problems. For example, problems were identified due to changes in data-system efficiencies and coverage. Data from two of the intended cost areas were eliminated from the differences-in-differences (DID) cost estimation: there were insufficient baseline-period data for mental health, and competing changes caused by welfare reform for welfare.

To remediate other analytic issues due to sample composition and time lag, a twofold approach was employed to strengthen causal inference from the analysis, i.e., to isolate the SACPA cost as precisely as possible. First, a widely accepted DID econometric-modeling approach was used to compare offender groups. Second, covariance adjustments were used at two levels in an effort, first, to statistically minimize the effects of offender background characteristics and, second, to correct for general contextual conditions in which certain time trends in events (such as overall state economic conditions and changes in crime statistics that were unrelated to SACPA) could have varied significantly over the full period of comparison. Such variation might have had spurious effects on findings. However, despite including several important contextual variables as covariates, such statistical corrections may not have fully eliminated non-comparability of data. The DID and covariance adjustment approaches are described in greater detail below.

#### *Difference- in-Differences (DID)*

Each of the three studies used a DID approach. This approach is common in econometric analyses of data from randomized experiments or in natural experiments such as SACPA,

where a time-lagged comparison group was constructed. It is important to understand the DID approach fully before interpreting findings and conclusions.

Offenders in each group had a pre-period and a post-period. The pre-period covered thirty months before the date of the offender's conviction for a SACPA-eligible offense. The post-period covered thirty months beginning on the date of that conviction. Costs were calculated for each offender in each period and were based on two cost elements: quantities and prices. Quantities are a count of events, such as days in drug treatment, days in prison, and quarters of earned income. Events were counted for each offender's pre-period and post-period. A price, based on one or more authoritative sources or from available data, was assigned to each event and multiplied by the count of that event, yielding a cost in that category for each offender in each group in each period. All prices were expressed in 2004 dollars using the consumer price index or, as appropriate, the medical price index.

The first difference in the DID approach is between the pre-period and the post-period for each offender. The pre-period figure is the offender's baseline cost burden, and the post-period figure is the offender's cost burden in the followup period. The difference shows the degree to which costs for that offender rose or fell over a standard followup time frame. By finding the differences in costs between the post- and pre-periods for each offender, the analysis was able to compare post-period costs after adjusting for the costliness that each offender came in with; that is, each offender served as his or her own control. The second difference in the DID approach is the difference between groups. That is, did the pre-post change for all offenders in each group indicate lower or higher per-offender costs in one group or the other? Appendix C contains an illustration of a hypothetical DID example.

#### *Covariance Adjustment*

In all studies, the comparison- and SACPA-group analyses were conducted after controlling for offender-background characteristics, including age, gender, race/ethnicity, prior drug-treatment history, prior criminal history, and home county. UCLA used covariance adjustment to remove any extraneous effects of these characteristics on findings.

As noted, contextual conditions could have affected the two groups differently. Adjustments were made for two of the conditions possibly affecting SACPA outcomes: national crime trends and the state unemployment rate. Other such contextual trends could be hypothesized to also affect one or the other of the groups differentially over the lagged time frames used. One such trend was the rapid change in welfare benefits over the study period under the impetus of welfare reform policies and practices. This last trend could not be corrected for by covariance adjustment since data shifts due to welfare reform could not be disentangled from those of SACPA.

#### **Costs Covered**

As noted, the analysis covered costs in eight domains (cost categories): five in criminal justice (jail, prison, probation, parole, arrests and convictions), two in social services (drug treatment and healthcare), and one related to taxes paid (taxable earnings and sales tax). The count of events that served as a basis for cost calculation was obtained from California administrative databases. The extent to which such data contain errors potentially affecting reliability and validity varies across data sources and depends on the complexity and quality of the data collection, entry, and internal correction processes.

Since these concerns apply equally to the SACPA and comparison groups, the DID approach essentially removes any relative effect of data errors on findings.

This section provides a summary of costs in each cost category. These categories cover the majority of cost domains cited in the evaluation's cost-research questions, which were formulated throughout the evaluation planning (see Appendix A). It should be noted, however, that the cost analysis could not fully address all of the questions formulated by SACPA stakeholders and advisors. For example, UCLA determined that the likely number of offenders diverted from prison would fill a medium-sized prison. However, California prisons are so overcrowded that the most likely effect of SACPA would simply be less overcrowding. Whether prison construction can be deferred or eliminated thus becomes a more long-term and broader question, and one beyond the scope of the SACPA evaluation.

Jail and prison costs were based on days served in custody (not days sentenced) for each offender. Unlike prison days, where a release date could be obtained from state administrative data, days in jail had to be imputed from sentenced time as reported in administrative data, adjusted by percent of sentence time served, which varied by county depending on local policy and budgets. A survey of counties by ADP and UCLA obtained each county's best estimate of percent of time served. The price of a jail day also varied by county and was costed accordingly. Jail costs were assigned to each offender based on the offender's county of conviction. The price of a prison day was assumed to be the same for all offenders confined in any of the state prisons. Because the number of jail and prison days served by SACPA offenders was similar to the full census of a mid-size facility, the analysis used the average cost of a jail or prison day rather than the marginal cost.<sup>33</sup>

Probation and parole costs were based on supervision days for each offender. Dual supervision was not taken into account. The cost of a probation-supervision day varied by county and was priced accordingly. The cost of a parole-supervision day was assumed to be the same across counties.

All arrests and convictions in California were recorded.<sup>34</sup> Arrest and conviction costs covered felonies and misdemeanors in all crime categories (drug, property, violent, and other) as well as motor-vehicle accidents resulting in arrest. In analyses using the taxpayer perspective (which includes only costs to state and local governments), arrest and conviction costs included all case-processing costs and that portion of victim services (medical care, ambulance services, mental healthcare, police/fire services, and victim services) likely to have been paid by public sources. Police and sheriffs' costs were based on arrests because an arrest leads to case-processing costs whether or not a conviction later occurs. However, victim services, superior courts, and county prosecutor costs were conservatively estimated based on convictions because the formal determination that an offender committed the offense leading to such costs is represented by conviction, not simply arrest.<sup>35</sup>

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<sup>33</sup> Marginal costs reflect only those costs due to increased staffing, feeding, medical care, and other costs associated with the number of offenders incarcerated. Average costs also include those for facility construction and maintenance.

<sup>34</sup> The evaluation did not have access to information on out-of-state offending.

<sup>35</sup> While the taxpayer perspective is used for the cost analyses, analyses using the broader "social-planner perspective" are also possible. The social-planner perspective includes costs to the public as well as to state and local governments. For example, in the calculation of costs attributable to new crimes the social-

Drug treatment for each offender was costed by treatment modality (outpatient, methadone maintenance, or residential) received by that offender because modalities can vary substantially in cost. Days in treatment were obtained from the California Alcohol and Drug Data System (CADDs), maintained by the California Department of Alcohol and Drug Programs. In some cases, discharge information was missing. An imputation of days of treatment for each modality was used in such cases based on the average duration calculated for those having a discharge date.

Healthcare costs covered medical claims as paid by the state Medi-Cal and Medicaid system.

Taxable earnings as reported to the California's Employment Development Department (EDD) for each offender were calculated in order to arrive at amounts paid in state income tax and local sales tax.<sup>36</sup> This cost domain is on the "plus" side. That is, the overall cost in the SACPA and comparison groups was reduced to the extent that offenders in those groups paid taxes.

Finally, welfare status was obtained from the Department of Social Services. Costs actually paid were not directly available. As noted, these data could not be used for the cost analysis because of the confounding effects due to welfare reform. Some descriptive data are provided, however, in Findings.

### **Analytic Issues**

Several analytic issues had to be addressed in the cost analysis. Some were decided on the basis of standard practice in econometrics or on professional consensus. Others were not amenable to a single decision, either because none of the plausible alternatives were clearly superior or because the alternatives might have affected findings to a degree too large to be left unexplored. UCLA used sensitivity analyses to address both of these issues. Sensitivity analysis allows possible alternate scenarios to be explored and their effects on cost variability to be determined. Ideally, results from sensitivity analyses tend to converge on those from the chosen analysis, and add to the confidence in those results. Results reported here were well within the mid-range of results using alternate modeling assumptions.

The UCLA analysis was conducted using STATA 9, a program that is frequently used in econometric modeling and that has the appropriate features to allow for robust estimation using multiple modeling techniques. A variety of methods are also available to add statistical control to the analyses. The two modeling approaches chosen for this study were Generalized Least Squares and General Linear Models. We chose to report the results of the Generalized Least Squares analysis here due to ease of interpretation. However, the General Linear Model approach was used in UCLA's sensitivity analysis and those results did not affect findings to any significant degree.

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planner perspective included case processing and victim-service costs included in the taxpayer perspective detailed above as well as property loss or damage, pain and suffering, and quality of life impacts incurred by victims themselves and perhaps in part by private insurers.

<sup>36</sup> The social-planner perspective includes the full value of foregone-employment earnings, whereas the taxpayer perspective considers only consumption taxes and the income taxes paid on earnings.

## Appendix A: Research Questions

UCLA used administrative data maintained by state agencies and collected unit-cost information from drug-treatment, criminal-justice, and other sources in order to measure costs and cost savings and to evaluate the adequacy of funds appropriated. However, some of the questions posed by SACPA stakeholders related to Research Question 2 cannot be directly answered by UCLA's findings given the data available. Counties have made reports of such expenditure allocation, but these data have not been verified by UCLA. Frequently, the counties were not able to precisely specify the amounts allocated to these various services. Thus, the findings inform the broader discussion concerning changes in SACPA and renewal of appropriations (see Conclusions and Recommendations).

Research Question 1: Does SACPA lead to cost savings?

Sub-questions 1.1 to 1.7 cover components of costs and cost savings. The difference in cost for SACPA offenders and comparison offenders was calculated for each component and combined across all components to determine whether SACPA led to net cost savings. Sub-question 1.8 pertains to possible averted costs of prison and jail construction. Those costs will be calculated separately.

Sub-question 1.1: Drug treatment costs and cost savings. What are the drug-treatment costs for SACPA offenders versus comparison offenders?

Sub-question 1.2: Services costs and cost savings. What are the healthcare and social service costs for SACPA offenders versus comparison offenders?

Sub-question 1.3: Case-processing costs and cost savings. What are the law-enforcement, prosecution, defense, and court costs for SACPA offenders versus comparison offenders?

Sub-question 1.4: Probation costs and cost savings. What are the probation-supervision costs for SACPA offenders versus comparison offenders?

Sub-question 1.5: Parole costs and cost savings. What are the parole-supervision costs for SACPA offenders versus comparison offenders?

Sub-question 1.6: New crimes costs and cost savings. What are the costs of new crimes by SACPA offenders versus comparison offenders?

Sub-question 1.7: Incarceration costs and cost savings. What are the costs of jail and prison incarceration for SACPA offenders versus comparison offenders?

Sub-question 1.8: Construction. Does SACPA lead to a cost savings from delayed or averted prison and jail construction?

Research Question 2: Does the enacted SACPA allocation cover the cost of drug treatment, other services, case processing, and supervision of SACPA offenders?

Sub-question 2.1: SACPA allocation. What percentage of the cost of drug treatment, other services, case processing, probation supervision, and parole supervision (measured in Sub-questions 1.1 to 1.5) is covered by the SACPA allocation?

## Appendix B: Expanded SACPA-Evaluation Conclusions and Recommendations<sup>37</sup>

### *Introduction*

The main report highlighted the major conclusions and recommendations from the SACPA evaluation. This appendix furthers six overarching goals that UCLA recommends should figure in all policy discussions and planning regarding SACPA.

The goals for improving SACPA include further improving systems integration across criminal justice agencies and drug treatment systems within the counties; optimizing offender suitability, acceptance of the treatment alternative, and accountability; increasing offenders' engagement and retention in, and completion of, drug treatment; improving matching of severity of dependence to intensity of services, with broader and more accessible services for special populations; developing collaborative methods to increase continuity of care and provision of aftercare; and establishing a structure for strategic planning and continuing systems improvement.

Attention to these background goals requires synchronized statewide coordination and collaboration; offender-eligibility and alternate strategies for high-cost offenders; systems integration; and criminal-justice, drug-treatment, and strategic planning as elaborated below. Mechanisms are suggested within levels of government and agencies charged with SACPA implementation, to improve outcomes in areas identified throughout the evaluation. In framing these recommendations, UCLA relied on the cost analysis and on prior UCLA evaluation reports. UCLA also drew from other published reports on various aspects of SACPA<sup>38, 39</sup> and on recent reviews of research findings on treatment for substance-abusing offenders.

### *Statewide Collaboration and Coordination*

ADP should be given the statutory authority and responsibility to assume greater oversight for SACPA. UCLA recommends that a strategic plan be developed by a committee of ADP representatives along with of experts from criminology and drug-treatment research, law enforcement, provider organizations, and other stakeholders.<sup>40</sup> One major goal should be to develop a long-range strategic plan, guided by past and ongoing research on SACPA, to improve the program in each successive year.<sup>41</sup> Since

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<sup>37</sup> The historical development of the SACPA initiative and its implementation are presented in Appendix D.

<sup>38</sup> Cited reports are at [www.adp.cahwnet.gov/SACPA/P36\\_Reports.shtml](http://www.adp.cahwnet.gov/SACPA/P36_Reports.shtml).

<sup>39</sup> Notably, an Avisa Group report, entitled "Proposition 36 Today: A Study of California Stakeholders in 10 Counties" observes that "Respondents offered a number of suggestions...including changing the eligibility criteria to screen out clients presumed or shown to be little interested in recovery and adding graduated sanctions, which they felt would remove clients with little interest in recovery from the program more quickly.... Shortening waiting times and thereby accelerating the initiation of the treatment process and successfully enrolling more of the Proposition 36 offenders in appropriate treatment.... Inadequate access to residential treatment was mentioned by 17 percent of respondents" (in response to the open-ended question, "What aspects of Proposition 36 could work better in your county?"). "Many, however, were insistent that increased funding be tied to better measurements of treatment results and other Proposition 36 processes in order to target the increased funding and allocations to more effective practices and programs."

<sup>40</sup> During the first five years of SACPA, a Statewide Advisory Group (SAG) was constituted by ADP to perform some of the functions recommended here. The SAG could be reconstituted and realigned to encompass this broader role.

<sup>41</sup> Prior research by other authors supports the use of strategic planning. See Berry, F.S., and B. Wechsler (1995). "State agencies' experience with strategic planning: Findings from a national survey." *Public Administration Review*, **55**(2), 159–168; Eadie, D.C. (1983). "Putting a powerful tool to practical use: The application of strategic planning in the public sector," *Public Administration Review*, **43**(5), 447–452; and

the continued improvement of SACPA will likely require the adoption, adaptation, implementation, and evaluation of research-based elements, the committee should explore ways to approach the federal government and California and national foundations for resources to assist in this process.

Since the value of using administrative databases has been shown repeatedly in evaluation research and demonstrated amply in the SACPA cost report, the committee should devise and implement standard methods for research access to such information across all state agencies. The SACPA cost evaluation was constrained in acquiring necessary data by diverse and time-consuming requirements of each separate state agency. For example, one agency believed that their interpretation of the relevant law required denial of data access. ADP was then required to add text to a bill trailer that assuaged the agency's concerns about the legality of supplying the data. In addition, repeated attempts to clarify data anomalies were required. A concerted, collaborative effort should be made at the state level to streamline access to and use of this information for authorized policy and evaluation studies.

#### *Offender Eligibility and Alternate Strategies for High-Cost Offenders*

An important finding from the UCLA cost analysis was that a few SACPA offenders were responsible for a disproportionately large share of arrest and conviction costs. The “typical,” or median-level, SACPA offender did well in terms of post-period arrest and conviction costs. The typical offender had one drug arrest, no arrests for property, violent, or sex crimes, and *no* drug, property, violent, or sex-crime convictions in the thirty months following his or her SACPA-eligible conviction. As such, the typical offender contributed little to arrest and conviction costs. At the other end of the cost distribution, however, a small number of offenders (1.6%, N = 1010) accounted for a disproportionately large share of these costs.<sup>42</sup> This is a common finding in criminology, and efforts to contain such high-cost and high-rate offenders are often the focus of policy and practice initiatives (e.g., California's Three Strikes law).

Individuals with five or more convictions in the thirty-month period prior to their SACPA-eligible arrest (some 70 percent of the high-cost offenders) were, under current procedures, just as eligible to be referred to SACPA as offenders with limited criminal-justice histories. However, these offenders had twice as many drug convictions in the thirty-month followup period, three times as many property crimes and violent crime convictions, and eleven times as many sex-crime convictions as the average, as opposed to median, SACPA offender. The per-offender arrest and conviction cost in the followup period by offenders with five or more prior convictions was ten times higher than that of the typical offender.

Alternatives for processing or managing this subset of SACPA-eligible offenders need to be considered. Possible options include changes at the treatment, eligibility, and criminal-justice levels (and these are not mutually exclusive). At the drug-treatment level, these offenders could receive residential placement for at least six months after SACPA diversion, with supplemental interventions designed to deal with high-rate offenders. At the eligibility level—and since SACPA eligibility is set in law, legislative

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Miller, C.C., and L.B. Cardinal (1994). “Strategic planning and firm performance: A synthesis of more than two decades of research,” *The Academy of Management Journal*, 37(6), 1649–1665.

<sup>42</sup> A study conducted by the RAND Corporation found that many ostensibly low-level drug offenders in prison had more serious criminal histories than their “low-level” label suggests (Riley, J.K., et al. (2005). *Just Cause or Just Because?* Santa Monica, CA: RAND).

action would be required—offenders with five or more prior non-drug convictions in the three years prior to the SACPA-eligible conviction could be deemed inappropriate for SACPA diversion, and alternate options could be exercised. At the criminal-justice level, such offenders could be monitored with greater utilization of drug-testing results and reporting requirements. Placing these offenders into drug court monitoring should be considered. These and other options (e.g., placement in an in-prison or in-jail drug-treatment program) should be examined, with representation from the criminal justice, drug treatment, and research fields.

### *Systems Integration*

SACPA implementation required substantial collaboration among local criminal-justice, drug-treatment, and other agencies in order to process and serve eligible drug offenders. In preparation for implementation, most counties established task forces with representation from the affected agencies (including county administrators, drug-treatment providers, judges and court administrators, district attorneys, defense attorneys, and probation and parole representatives) to determine the procedures that seemed most practical and efficacious given local circumstances. Accordingly, while many aspects of implementation were similar across counties, considerable variation resulted.

Both common and particular procedures by counties were studied using qualitative and quantitative approaches over the five-year course of evaluation, and a number of recommendations have been made in prior SACPA reports (see Footnote 1). We also refer the reader to the November 2005 Legislative Analyst Office report, “The Future of Proposition 36 Funding,” and the 2004 Little Hoover Commission Report, “For Our Health and Safety: Joining Forces to Defeat Addiction.”

Specifically, in terms of system integration and SACPA implementation, UCLA noted that assessment rates were higher in counties with assessment in or near the court, where offenders were allowed more days to report for assessment, where probation and assessment staff were co-located, where offenders were allowed to “walk in,” and where offenders could complete assessment procedures in one visit. More widespread adoption of these practices would likely increase show rates at assessment centers. In addition, UCLA found that the likelihood of SACPA offenders reporting for assessment and subsequently for treatment was higher in counties using one or more drug-court procedures to handle SACPA offenders. Counties should examine the practicality of more-specialized courts for processing SACPA offenders or incorporating efficacious drug-court elements.

As one potential state resource, the Network for the Improvement of Addiction Treatment<sup>43</sup> (NIATx), a partnership among the Robert Wood Johnson Foundation, the Center for Substance Abuse Treatment, and other agencies, has shown success in reducing time to assessment and time to treatment admission, in reducing no-show rates, and in increasing treatment-continuation rates through the a number of practices aimed at improving drug-treatment processes. Many of these could also apply to processing of SACPA offenders by the criminal justice system. Five states (Delaware, Iowa, Oklahoma, North Carolina, and Texas) have participatory pilot projects.<sup>44</sup> ADP should explore NIATx methods and assess if they can be reproduced in California’s county

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<sup>43</sup> The NIATx website is [www.niatx.org](http://www.niatx.org). Results obtained when using NIATx can be seen at [chess.chsra.wisc.edu/pathstorecovery/P2RPresentations/ASHR%20Presentation\\_10-21-05\\_final.pdf](http://chess.chsra.wisc.edu/pathstorecovery/P2RPresentations/ASHR%20Presentation_10-21-05_final.pdf)

<sup>44</sup> The NIATx outcome data was collected independently of the current UCLA analysis.

drug-treatment systems. ADP should also examine the benefits of joining the partnership. Such actions could substantially improve outcomes for the SACPA population.

### *Criminal Justice*

At the criminal-justice level, changes in the legislation that defines SACPA processing criteria or eligibility are likely to improve cost outcomes. As noted, a small percentage of SACPA-eligible offenders contributed disproportionately to arrest and conviction costs. Possible adjustments include assignment to six to twelve months of residential treatment, intensive supervision, barring such offenders from SACPA, or alternatively receiving in-jail or in-prison drug treatment. Along this same line, the assigned probation or parole officer should work intensively with the SACPA offender to ensure a prompt initial admission visit and adequate resources (e.g., travel assistance). To improve compliance with SACPA requirements, offenders must be held accountable, through, for example, probation-officer escort to begin their treatment, increasing court oversight (e.g., drug-court monitoring), or brief jail stays (“flash incarceration”) as a possible sanction.<sup>45</sup> Oversight by the county lead agency to hold accountable all SACPA elements (criminal-justice supervision, treatment program, and offender) should continue after admission to resolve any difficulties with attendance or other requirements of treatment or supervision. A greater use of drug-testing results (both by probation and by community programs) and immediately applied sanctions of increasing severity are recommended for problematic or recalcitrant offenders during the period of probation-linked drug treatment. In accordance with research findings on accountability and contingency management, such measures (whether positive or negative) need to be clearly enumerated, the consequences (or benefits) specified, and sanctions (or rewards) swiftly and consistently applied for infractions (or for recovery milestones) of probation/parole or treatment conditions.<sup>46</sup>

### *Drug Treatment*

Drug-treatment resources should be adjusted to meet better the needs of high drug-severity offenders. In particular, residential treatment should be available for those with the most severe substance abuse, and methadone-maintenance programs should be provided for SACPA offenders with heroin or other opiate-dependence disorders who want it.<sup>47</sup> Providers should use methods developed and validated in research to improve treatment engagement, retention, services, and outcomes, while attending to culturally relevant differences. Such strategies include reducing delays from a request (or mandate) for treatment to the delivery of services, contingency contracting and management procedures, placing clients into another program rather than letting them abscond (or discharging them) from current services, aggressive re-engagement efforts via telephone if clients disappear, and post-treatment telephone followup to check on progress and promote treatment re-entry if relapse is detected. As previously noted, NIATx has shown success in reducing time to assessment and time to treatment admission, in reducing no-show rates, and in increasing treatment-continuation rates. In addition, the Center for

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<sup>45</sup> The benefits of flash incarceration are not well established (see Marlowe, D. B., and K. C. Kirby (1999). “Effective use of sanctions in drug courts: Lessons from behavioral research.” *National Drug Court Institute Review* 2(1), 1–31). Importantly, the offender’s perception of fair and impartial use of this sanction weighs heavily in determining success attributable to this method.

<sup>46</sup> Ibid.

<sup>47</sup> A primary benefit of methadone maintenance is the provision of a legal opiate in the context of appropriate counseling and ancillary services. Such treatment leads to better outcomes for opiate users over any other modality.

Substance Abuse Treatment (CSAT) Treatment Improvement Protocols (TIPs) describe empirically based techniques and provide manuals for training.<sup>48</sup>

### *Strategic Planning*

As has been seen in the cost report, the major economic benefits of SACPA derived from a reduction in jail and prison time served. The major attendant costs were those for subsequent arrests and convictions and for drug treatment itself. Probation and parole costs were modest, as were healthcare costs and government income from taxes on earnings and purchases. This is not to say that greater probation and parole expenditures would not improve the performance of offenders under SACPA. For example, enhancing supervision could increase the number of referred offenders who actually report for treatment, or attention to results of drug testing and subsequent action could interrupt relapse before it gains full severity. With Proposition 63 funding for better support of mental health services available to counties as of January 1, 2006, SACPA offenders with co-occurring mental-health disorders should be placed into dual-diagnosis services whenever possible. In addition, ADP should negotiate possibilities with federal agencies and local and national foundations (e.g., California Endowment, Robert Wood Johnson) for service and research funding to develop, assess, implement, and evaluate systemic and programmatic improvements for SACPA.

Since the Legislature has funded the SACPA program for an additional year (July 1, 2006 through June 30, 2007), UCLA suggests that some of this funding be directed to determine strategies to meet the aforementioned background goals, especially in regard to more centralized state oversight; to greater resources for improved referral procedures into drug treatment and enhanced retention services; to increasing attention to the results of drug testing to achieve better accountability and to identify any emergent relapse for aggressive intervention; and to provide proven aftercare and continuity of care services. As noted above, the possibility of joint funding from both SACPA and Proposition 63 should be encouraged as counties modify their SACPA procedures in the coming years.

Finally, unless funding is appropriated for multiple years, it is likely that SACPA policies and practices will undergo considerable scrutiny as the Legislature debates each year of funding as part of the state's annual budgeting process.<sup>49</sup> During this recurrent process, further study of techniques and strategies to improve outcomes in all the aforementioned areas should be encouraged.<sup>50</sup> It is likely that many empirically based methods that have achieved better results in some settings will require adaptation to the local SACPA policy and practice ecologies of the various counties. Hence, an ongoing formative evaluation process to allow a "quality-improvement" cycle of enhancement selection, adaptation,

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<sup>48</sup> TIP 44, *Substance Abuse Treatment for Adults in the Criminal Justice System (2005)*; TIP 7, *Screening and Assessment for Alcohol and Other Drug Abuse Among Adults in the Criminal Justice System*; TIP 12, *Combining Substance Abuse Treatment With Intermediate Sanctions for Adults in the Criminal Justice System*; and TIP 17, *Planning for Alcohol and Other Drug Abuse Treatment for Adults in the Criminal Justice System*.

<sup>49</sup> In its current form, SB 803 allows for multi-year funding of SACPA. Should this aspect of the proposed bill be retained, SACPA policies and practices should be subjected to annual review to ensure incremental improvement in the program.

<sup>50</sup> The Little Hoover Commission Report, "For our health and safety: Joining forces to defeat addiction," (\*year\*) includes "Recommendation 3: The State should implement outcome-based quality control standards for treatment personnel, programs, and facilities and encourage continuous quality improvement." The report also suggested to "Tie provider reimbursement to outcomes: After establishing performance benchmarks and implementing [the California Outcomes Monitoring System] (CalOMS), [ADP] should [consider] reward[ing] high quality treatment providers with higher rates of reimbursement."

application, specific evaluation, and reassessment should be undertaken in all subsequent years of SACPA funding. An outcomes-evaluation effort, conforming to the strategic-planning process recommended above and similar to that mounted in SACPA's first five years should be funded, as well. Results obtained from this evaluation would also feed into the quality-improvement cycle of SACPA refinements.

### Appendix C: Difference-in-Differences (DID) Hypothetical Example

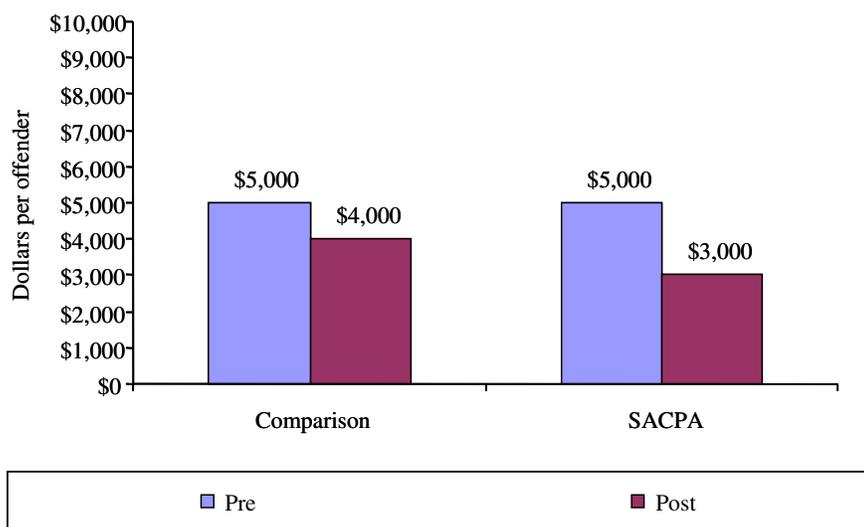
The difference-in-differences (DID) approach is a widely adopted method for policy and program evaluation in many fields, especially cost determination. This section illustrates how to interpret the DID results reported for SACPA. Briefly, assume that we are trying to estimate the effect of SACPA on some hypothetical cost. Assume also that we estimate that, for the SACPA group, the average cost per offender was \$5,000 in the thirty months *before* the SACPA-eligible conviction and \$3,000 in the thirty months after the SACPA-eligible conviction.

The difference between the pre- and the post-period is \$2,000. This scenario illustrates the standard pre-post design. Here, the \$2,000 cost reduction is attributed to the policy.

But now assume the same analysis is performed on our comparison offenders. Assume that the average cost per offender was \$5,000 in the thirty months *before* the equivalent of a SACPA-eligible conviction and \$4,000 in the thirty months after the SACPA-eligible conviction. This analysis is shown in Figure 14.

For offenders in the comparison group the difference between the pre- and the post-period is \$1,000. This represents, in this case, the cost reduction (we could have hypothesized an increase) that we would have expected to observe in the absence of the law. Thus, attributing the full \$2,000 reduction illustrated in Figure 14 to SACPA (the result of the standard pre-post design) would be misleading. To estimate more precisely the impact of SACPA, we determine the cost difference that would have been expected had the law not been implemented. Figure 15 illustrates the DID estimate as being the difference between the \$2,000 cost reduction observed among the SACPA offenders and the \$1,000 cost reduction observed among the comparison offenders.

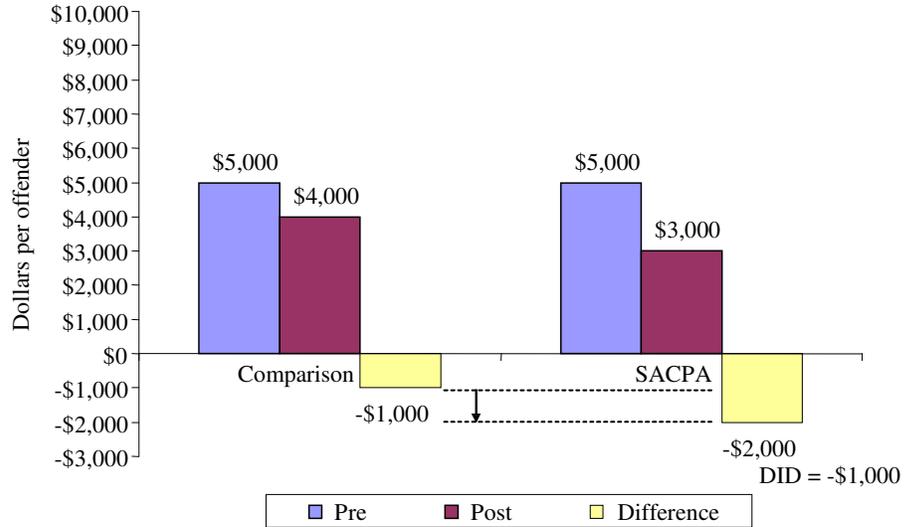
**Fig 14. Illustration of a Hypothetical Cost Module**



The DID estimate has a clear interpretation. The dollar value estimated shows us how much the average cost per offender differed under SACPA compared with what would have been expected if the law had not come into effect. For the hypothetical cost module in this illustration, the DID estimate leads us to conclude that costs under SACPA were

on average \$1,000 lower per offender than what average offender costs would have been in the absence of the law.

**Figure 15. Illustration of a Hypothetical Difference-in-Differences Computation**



This approach was applied to the eight cost areas described in the Findings section of the main report. In that section, each figure gives the calculated pre- and post- values, the differences within each group, and the DID between the two groups.

## **Appendix D: Historical Context of SACPA Implementation**

The context in which the SACPA initiative and law developed merits consideration in understanding how implementation proceeded. The SACPA legislation was prepared mostly by advocacy groups using the state initiative process, thereby bypassing the legislative process. Opposition to the initiative, especially from the criminal-justice system, was widespread. Importantly, there was little opportunity for substance-abuse and criminology researchers to be formally involved in framing the law and proposing empirically based strategies for its subsequent implementation. Additionally, while ADP was the agency charged with overseeing SACPA, the responsibility fell to the counties to implement it locally.<sup>51</sup> As a result, insufficient consideration was given in the initiative to case flow, efficiency, and accountability mechanisms by law enforcement (the courts, probation, parole) and drug-treatment systems at both state and county levels. This contributed to capacity and service issues that yielded less-than-optimal placement for some offenders. For example, lack of residential program slots in many counties required that high-drug-severity offenders were placed in outpatient care as the only primary alternative (a placement that may have contributed to the higher arrest and conviction costs found in the SACPA followup).

Statewide, more consideration should have been given to the capacity of law enforcement and drug-treatment systems to accommodate the increase in the number of offenders requiring supervision, as required by the law, and of offenders requiring drug treatment. Particularly at the county level, consideration should have been given to whether drug-treatment providers were able to adhere to clinically established guidelines and best practices in the treatment of substance-involved offenders.<sup>52</sup> Prior SACPA evaluation reports made several recommendations for improving treatment outcomes (e.g., placing opiate-dependent offenders in methadone maintenance programs). However, stakeholders did not optimally implement these recommendations in later SACPA years. The overall efficiency and efficacy of SACPA could have been increased with more attention to resource allocation and strategic planning. In the forthcoming years of SACPA, continuing system improvement is required to address these shortcomings.

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<sup>51</sup> However, in the survey of county stakeholders, most respondents felt that the flexibility given to counties was a beneficial element of the implementation, a pragmatic observation given the realities of their local treatment and supervision ecologies.

<sup>52</sup> ADP issued All County Lead Agency (ACLA) letters to promote best practices, but had little authority to require adoption.