

*The California AB 377 Evaluation Project
Three Year Summary Report*

EXECUTIVE SUMMARY: THREE YEAR REPORT

This report presents an overview of three years of findings from the California AB 377 Evaluation Project. This project was established to study the replication of an innovative system of care in three California counties for youth suffering from severe emotional disturbance. Development of the innovative system of care was pioneered in Ventura County, California, and the replications were legislatively enabled through Assembly Bill 377 (AB 377). The California AB 377 Evaluation Project is a multi-year collaborative mental health services research effort between the University of California, San Francisco (UCSF), Langley Porter Psychiatric Institute and the California State Department of Mental Health (State DMH). The research is being conducted through the UCSF Department of Psychiatry in collaboration with the Institute for Mental Health Services Research, based in the Western Consortium for Public Health in Berkeley, California.

The California AB 377 Evaluation Project is best conceived as evaluation research designed to document and assess the efforts in California to disseminate, implement, and enhance an integrated system of care for children and adolescents having severe emotional disorders. The long term, central goal of the AB 377 Evaluation Project is to study the implementation of the Ventura Planning Model within three new environments to determine its costs and effectiveness. All data collected and analyzed in this effort are in the form of secondary data provided by the counties and several state agencies.

The California AB 377 Evaluation Project follows the legislative mandate to collect data regarding four important system of care performance criteria: (a) to ensure that the target population is being served as intended, (b) to reduce reliance on restrictive levels of care, especially reliance on state hospital and group home admissions, (c) to reduce the likelihood of re-arrests for youth in the target population who are involved in the juvenile justice system, and (d) to improve the educational performance to target population youth in school settings. In addition, the California AB 377 Evaluation is monitoring the characteristics of the youth served by the programs and of the context in which the youth are served.

This report summarizes three years of findings from the California AB 377 Evaluation project and focuses on the characteristics of the target population and the utilization of restrictive levels of care in the AB 377 counties. Results on re-arrests and educational performance will be presented in future reports. Key findings include:

- The demonstration counties have generated lower per capita inflation adjusted rates of expenditures and per capita group home placements than California as a whole. The evaluation results provide evidence that an integrated system of care can reduce group home placements.
- Foster home expenditures are lower for the counties replicating the innovative system of care than for the state of California as a whole. Expenditures for special education

residential placements are either at the state rate or, in two counties, lower. State hospital expenditure and utilization rates are below the state rate in two of the demonstration counties and are slightly higher in one of the demonstration counties.

- The cumulative evidence supports the conclusion that the replication counties are utilizing restrictive levels of care at lower rates than would be expected given state-wide patterns.
- In general, the youth served are male, older, have low Global Assessment of Functioning (GAF) scores, and predominately receive clinical diagnoses of affective disorders and disruptive behavior disorders. African-Americans are over-represented in the care systems relative to the general population and Asian-Americans are under-represented. These characteristics match those found in other studies of youth who receive treatment for severe emotional disturbance.

The AB 377 counties are clearly demonstrating lower per capita group home expenditure rates than the State of California. An estimate of cost savings can be provided given the following assumptions: (a) California per capita rates represent an accurate standard against which to judge the performance of the counties; (b) Changes in per capita rates of group home expenditures in the AB 377 counties are due to the innovative interventions and began in February, 1989; and (c) Costs of the interventions are *not* included in the analysis. Given these assumptions, the following cost savings for group home expenditures are calculated (all per capita rates are calculated by using 1990 census estimates of persons *under age 18*):

- *Santa Cruz.* Santa Cruz has saved \$57.03 per capita yielding a total savings of \$3,179,936 when compared to trends for the State of California from February, 1989 to June, 1992.
- *San Mateo.* San Mateo has saved \$64.66 per capita yielding a total savings of \$9,327,969 when compared to trends for the State of California from February, 1989 to June, 1992.
- *Riverside.* Riverside has saved \$67.63 per capita yielding a total savings of \$23,303,634 when compared to trends for the State of California from February, 1989 to June, 1992.
- *Group Home Total.* Taken together, the three AB 377 counties have saved \$35,811,539 total AFDC-FC costs when compared to trends for the State of California since February, 1989. San Mateo, Santa Cruz, and Riverside have saved at approximately the same per-capita rate when compared to the state.

Given the same assumptions as for the group home cost savings calculations, the following cost avoidances can be calculated for special education residential expenditures for two of the AB 377 counties: Santa Cruz and Riverside (San Mateo did not demonstrate a significant variation from the California rates to permit calculation of cost savings for that county):

- *Santa Cruz.* Santa Cruz has saved \$6.03 per capita yielding a total savings of \$338,520 when compared to trends for the State of California from February, 1989 to June, 1992.

- *Riverside.* Riverside has saved \$2.79 per capita yielding a total savings of \$991,889 when compared to trends for the State of California from February, 1989 to June, 1992.
- *Special Education Residential Totals.* Taken together, the two AB 377 counties have saved \$1,330,409 total special education residential expenditures when compared to trends for the State of California since February, 1989. Santa Cruz is saving at approximately twice the per capita rate as Riverside when compared to the state.
- *State Hospital Utilization and Expenditures.* Finally, the overall charges for state hospital placements for the AB 377 counties taken together are below what would be expected given their populations. In general, the numbers of youth placed remain relatively small (with no youth being placed in Santa Cruz); and do not seem to indicate that significant numbers of youth diverted from other placements are residing in the state hospital facilities.

The report concludes that across three different sites, county level systems of care based on the Ventura model can manage and control escalating expenditures and placements in specifically targeted restrictive levels of care.

*The California AB 377 Evaluation Project
Five Year Report*

EXECUTIVE SUMMARY: FIVE YEAR REPORT

This executive summary presents an overview of five years of findings from the California AB 377 Evaluation Project. This project was established to study the replication of an innovative system of care in three California counties for youth suffering from severe emotional disturbance. Development of the innovative system of care was pioneered in Ventura County, California, and the replications were legislatively enabled through Assembly Bill 377 (AB 377). The California AB 377 Evaluation Project is a multi-year collaborative mental health services research effort between the University of California, San Francisco (UCSF) and the California State Department of Mental Health (State DMH).

The California AB 377 Evaluation Project is best conceived as evaluation research designed to document and assess the efforts in California to disseminate, implement, and enhance an integrated system of care for children and adolescents having severe emotional disorders. The long term, central goal of the AB 377 Evaluation Project is to study the implementation of the Ventura Planning Model within three new environments to determine its costs and effectiveness. All data collected and analyzed in this effort are in the form of secondary data provided by the counties and several state agencies.

The California AB 377 Evaluation Project follows the legislative mandate to collect data regarding four important system of care performance criteria: (a) to ensure that the target population is being served as intended, (b) to reduce reliance on restrictive levels of care, especially reliance on state hospital and group home admissions, (c) to reduce the likelihood of re-arrests for youth in the target population who are involved in the juvenile justice system, and (d) to improve the educational performance of target population youth in school settings. In addition, the California AB 377 Evaluation is monitoring the characteristics of the youth served by the programs and of the context in which the youth are served.

Highlights from this executive summary that reflect significant changes since the last report include:

- For the five and half years running from February, 1989 to June, 1994, the State of California might have saved a total (in actual, non-inflation adjusted dollars) of \$984,284,609 in group home costs *if the State of California had followed the trend of the AB 377 counties instead of the actual trend in the state.*
- Total savings in group home expenditures across all three counties have **doubled** with two additional years of program implementation from the \$35,811,539 reported in the third year report to the **\$69,374,912** that are reported in the five year report.
- Total savings in special education residential expenditures have **tripled** with two additional years of program implementation from the \$1,330,409 reported in the third year report to the **\$3,249,989** that are reported in the five year report.

- Over the first five years of implementation, the AB 377 sites have reported significant reductions in juvenile justice re-arrests for youth served in specific programs. Our **independent analyses of the raw data** from the first two years of the programs confirm **statistically significant reductions in juvenile justice recidivism in the three counties. The mean number of arrests in the year after program admission decreased by at least half in the year following discharge.**
- Over the first five years of implementation, the AB 377 sites have reported significant improvements in educational achievement for youth served in specific programs. Our **independent analyses of the raw data** confirm **overall statistically significant improvements across programs in educational achievement as measured by standardized tests across all three counties. Data indicate that youth who were previously behind expected grade level on standard tests are improving one grade level for each year in school after admission to the programs.**
- Preliminary results from data collected through a complimentary evaluation effort in the AB 377 counties reveals **improvements over six months in child and adolescent functional status for youth served in the AB 377 counties. This includes improvements as measured by caregiver, youth, and clinician ratings.**

Other findings presented in this report include:

- The demonstration counties have generated lower per capita inflation adjusted rates of expenditures and per capita group home placements than California as a whole. The evaluation results provide evidence that an integrated system of care can reduce group home placements.
- Foster home expenditures are lower for the counties replicating the innovative system of care than for the state of California as a whole. Expenditures for special education residential placements are either at the state rate or, in two counties, lower. State hospital expenditure and utilization rates are below the state rate in two of the demonstration counties and are slightly higher in one of the demonstration counties.
- The cumulative evidence supports the conclusion that the replication counties are utilizing restrictive levels of care at lower rates than would be expected given state-wide patterns.

The AB 377 counties are clearly demonstrating lower per capita group home expenditure rates than the State of California. An estimate of cost savings can be provided given the following assumptions: (a) California per capita rates represent an accurate standard against which to judge the performance of the counties; (b) Changes in per capita rates of group home expenditures in the AB 377 counties are due to the innovative interventions and began in February, 1989; and (c) Costs of the interventions are *not* included in the analysis. Given these assumptions, the following cost savings for group home expenditures are calculated (all per capita rates are calculated by using 1990 census estimates of persons *under age 18*):

APPENDIX A

- *Santa Cruz.* Santa Cruz has saved \$107.64 per capita yielding a total savings of \$6,141,413 when compared to trends for the State of California from February, 1989 to June, 1994.
- *San Mateo.* San Mateo has saved \$112.29 per capita yielding a total savings of \$16,558,374 when compared to the trends for the State of California from February, 1989 to June, 1994.
- *Riverside.* Riverside has saved \$125.05 per capita yielding a total savings of \$46,675,125 when compared to trends for the State of California from February, 1989 to June, 1994.
- *Group Home Total.* Taken together, the three AB 377 counties have saved \$69,374,912 total AFDC-FC costs when compared to trends for the State of California since February, 1989. San Mateo, Santa Cruz, and Riverside have saved at approximately the same per-capita rate when compared to the state.

Given the same assumptions as for the group home cost savings calculations, the following cost avoidances can be calculated for special education residential expenditures for all three of the AB 377 counties:

- *Santa Cruz.* Santa Cruz has saved \$15.71 per capita yielding a total savings of \$904,437 when compared to trends for the state of California from February, 1989 to June, 1994.
- *San Mateo.* San Mateo has saved \$.71 per capita yielding a total savings of \$101,274 when compared to trends for the State of California from February, 1989 to June, 1994.
- *Riverside.* Riverside has saved \$5.88 per capita yielding a total savings of \$2,244,278 when compared to trends for the State of California from February, 1989 to June, 1994.
- *Special Education Residential Totals.* Taken together, the three AB 377 counties have saved \$3,249,989 in total special education residential expenditures when compared to trends for the State of California since February, 1989.
- *State Hospital Utilization and Expenditures.* Finally, the overall charges for state hospital placements for the AB 377 counties taken together are below what would be expected given their populations. In general, the numbers of youth placed remain relatively small and do not seem to indicate that significant numbers of youth diverted from other placements are residing in the state hospital facilities.

The report concludes that across three different sites, county level systems of care based on the Ventura model can manage and control escalating expenditures and placements in specifically targeted restrictive levels of care. Children and adolescents served in specialized programs within the systems of care are progressing normally on tests of educational achievement. Wards of the court with severe emotional disturbance demonstrate reductions in the rates of arrests after receiving services from specialized programs. Preliminary analyses indicate that children and adolescents enrolled in the system of care show reductions in symptoms and improvement in functioning after six months of receiving services.