

Additional findings from the Title IV-E Child Welfare Waiver Demonstration
Project: A comparison of Wraparound and Residential Treatment Services using an
experimental design

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Abstract

Differences in youth behavioral functioning and living arrangements at discharge between a wraparound program and a residential treatment program were examined. Both programs were part of the same non-profit agency. The agency participated in the Title IV-E Child Welfare Waiver Demonstration Project in Sacramento County, California. Youth selected for participation in the study were randomly assigned to Wraparound or Residential Treatment Services. The findings indicate that Wraparound, an innovative family-centered service, is associated with greater decreases in behavioral impairment and a greater likelihood of placement in the community at discharge when compared to traditional Residential Treatment Services.

I. Introduction

From 1997 to 2003, California's Title IV-E Waiver Demonstration Project in California examined wraparound as an alternative treatment approach for children receiving other expensive services. The Demonstration Project's independent evaluator, the Center for Social Services Research (CSSR) at the University of California, Berkeley, issued a report in May 31, 2004 stating "children receiving new and innovative services were no worse off than children receiving traditional services over the course of the evaluation" (Executive Summary, page 24). This conclusion seemed conservative to Stanford Home for Children (SHC), a non-profit service provider in the unique position of providing services to both the control and experimental groups in the Demonstration Project. In fact, SHC analysis of Demonstration Project subjects found that Wraparound was associated with a greater reduction of behavioral dysfunction and more desirable discharge placement outcomes than Residential Treatment Services (RTS).

These findings, while not completely divergent from CSSR results, provide an unambiguous depiction of the positive impact that Wraparound in particular and the waiver project in general, had on the children and families served by Stanford Home. The SHC findings may help answer important questions from direct service providers and policy makers as California emerges from the waiver project. To explain our findings, this paper will provide a brief background of the Demonstration Project, describe the agency and programs in which the research subjects received treatment, explain the research hypothesis and methodology, describe the findings and offer discussion and conclusions.

II. Brief Background

On August 19, 1997, the California Department of Health and Human Services approved the Title IV-E Waiver Demonstration Project, hereafter referred to as the “Demonstration Project”. This waiver allowed select counties in California to temporarily waive federal and state restrictions on the use of Title IV-E funds and use available dollars with the flexibility needed to test innovative methods of providing child welfare and juvenile justice services. The waiver hypothesized that the flexible use of Title IV-E funds permits the implementation of service models that are at least as effective and cost-effective as standard services. To test this hypothesis, the California Department of Social Services (CDSS) contracted the Center for Social Services Research (CSSR) at the University of California, Berkeley to perform the evaluation. On May 31, 2004, the CSSR’s final findings concluded that “children receiving new and innovative services were no worse off than children receiving traditional services over the course of the evaluation” (Executive Summary, page 24). The CSSR offered a “qualified endorsement of Wraparound” stating that, “while the overall trends do not indicate a difference between the groups [experimental and control] in the Wraparound counties, there were some significant improvements in outcomes” (Executive Summary, page 25).

The CSSR findings left non-profit care providers, key stakeholders, and policy makers at the county, state and federal levels with lingering questions regarding what steps to take next. As a non-profit care provider, SHC was asking: “Should we adopt the new and innovative practices, or keep doing what we were doing before? Which regulatory and funding model (flexible or traditional) is better for the families we serve?”

III. Stanford Home for Children

The answers to these questions will have a significant impact on the future of Title IV-E eligible children and families served by Stanford Home for Children (SHC). SHC provides a wide variety of community-based, family-centered services for approximately 300 children and their families annually. What began as a simple orphanage has become a complex array of services for children and families. SHC's comprehensive range of services includes residential treatment, foster care, mental health treatment, wraparound services, job assistance and community based alternatives to incarceration and residential care in juvenile justice. SHC served Demonstration Project Subjects in both the control and experimental groups.

A. Stanford Wraparound (experimental service).

Stanford Wraparound has been serving youth in Sacramento County since May 19, 2001. This program provides support for youth in the highest levels of out-of-home placement due to their complex needs. Wraparound serves any child, typically between ages 12-18, referred by Sacramento County Department of Mental Health, Child Protective Services or the Department of Probation. SHC provides wraparound services in a manner compliant with the Wraparound Standards adopted by the State of California in April 1999:

...the intent of the State of California Department of Social Services is to provide eligible children with family-based service alternatives to group home care, targeting Wraparound as the service alternative. Wraparound is a family-centered, strengths-based, needs-driven planning process for creating individualized services and supports for children, youth and their families. This approach facilitates access to normalized and inclusive community options, activities and opportunities. The intent is to keep these children in or return them to family settings. (SB 163 and Title IV-E Waiver Wraparound Standards, p. 1)

B. Stanford Residential Treatment Services (control service).

Stanford Home has been providing some form of group home or congregate care for over 105 years. Stanford Home provides residential treatment for Sacramento County children ages 12-18 at four community-based group homes. Within a closely supervised and very structured environment, severely emotionally disturbed youth are taught the behavior and life skills they need to become functioning members of their families and community. Stanford Residential Treatment Services (RTS) is a Rate Classification Level (RCL) 12 residential care program. Youth are referred by the Sacramento County Department of Mental Health, Child Protective Services or the Department of Probation. Stanford RTS does not provide emergency shelter, nor does it provide long-term permanent placements. Stanford RTS provides care that has met or exceeded the standards set by Community Care Licensing, a division of the California Department of Consumer Affairs. Additionally, the program is accredited by the California Alliance of Child and Family Services.

C. Stanford Home's Research Department.

SHC joined the Intensive Services Component (ISC) of the Demonstration Project in May 2001, serving subjects in both the control and experimental groups. Control group subjects received only RTS. Experimental subjects received Wraparound. As participation in the Demonstration Project required a considerable investment in program evaluation, the agency established an independent research department to act as a liaison with Sacramento County officials and CSSR. In addition to contributing data to CSSR, the SHC Research Department performed internal evaluations of Stanford Wraparound and Stanford RTS programs.

IV. Research Design

The present study seeks to supplement CSSR's study by comparing two distinct interventions. Does Wraparound, an innovative family-centered service requiring a more flexible usage of Title IV-E funds, result in more desirable outcomes than Residential Treatment Services, a treatment that stands in compliance with more restrictive use of Title IV-E dollars, for this population? Using an experimental design, we analyzed program outcome data for Wraparound (experimental) and RTS (control). SHC's unique position as a provider of services to both the Demonstration Project's experimental and control groups allowed for this functional investigation of differences in outcomes for each program. All data was collected between January 1, 2000 and December 31, 2004 by the SHC Research Department. (Please note that this study was able to follow the progress of Demonstration Project subjects longer than the CSSR study).

V. Hypothesis

Wraparound, an innovative family-centered service, is associated with greater decreases in behavioral impairment and a greater likelihood of placement within a family or community setting at discharge when compared to RTS, a standard traditional service.

VI. Subjects

Subjects were SHC youth between the ages of 12 and 18 years, all whom were admitted to a Stanford RTS group home after January 1, 2000 and discharged by December 31, 2004. That is, all subjects in this study started out in the same Residential

Treatment Program, regardless of their assignment to the control or experimental group. This sample offers considerable control of extraneous variables and minimizes research confounds. Youth were randomly selected for participation in the Demonstration Project and assigned by CSSR to either a control or experimental group. That is, the assignment was done by CSSR, not SHC researchers. Once assigned, control group youth continued to receive RTS services while experimental youth began receiving Wraparound. Initially, Wraparound subjects received both treatments until the Wraparound Child and Family Team (CFT) achieved a discharge from RTS. Using the aforementioned criteria, the random assignment yielded 20 control group and 17 experimental group youth.

Before conducting analysis on outcomes, population demographics were analyzed. The following table represents the demographic breakdown of both control and experimental populations.

Gender	Control N=20	Experimental N=17
Female	65%	65%
Male	35%	35%
Age	Control N=20	Experimental N=17
Mean	14.67	15.06
Median	14.46	15.04
Ethnicity	Control N=20	Experimental N=17
African American	50%	47%
Caucasian	30%	35%
Latino	15%	12%
Multi-ethnic	5%	6%

Although small demographic differences between populations were observed, both the control and experimental populations served by SHC were found to be homogeneous.

VII. Outcome Measures

The desired outcomes in Stanford Wraparound and Stanford Residential Treatment Services are the same: to improve youth and family adjustment and functioning and to return youth to family settings in the community as quickly and effectively as possible. The following dependent variables were selected for analysis, based on the agency's mission: (1) change in behavioral functioning and (2) placement at discharge.

A. Change in behavioral functioning.

To assess changes in behavior, the Child and Adolescent Functional Assessment Scale (CAFAS) © Copyright 1995 by Kay Hodges, Ph.D. was used. SHC clinicians completed the CAFAS to assess the degree of change in youth behavioral functioning at program intake and discharge for both experimental and control groups.

The CAFAS assesses levels of youth impairment across eight subscales: School/Work Role Performance, Home Role Performance, Community Role Performance, Behavior Towards Others, Moods/Emotions, Self-Harmful Behavior, Substance Use and Thinking. Each subscale is evaluated and given a score based on four levels of impairment. Each subscale score is added together to produce a Total CAFAS score ranging from 0 to 240. A higher score indicates a higher level of behavioral dysfunction.

B. Placement at Discharge.

SHC uses placement categories developed by a cross-system Quality Improvement Committee in Sacramento County. There are two general placement categories - "community" and "facility" - which contain more detailed living

arrangements sub categories. Community placement includes placements with family, extended family, and non-related kin. Facility placement includes placements in other residential programs, incarceration, and hospitalization.

VIII. Results: Behavioral Functioning.

To assess each program’s association with more desirable outcomes, we examined changes in subject behavioral functioning within and between groups using analysis of variance (ANOVA) to assess the level of significance.

A. Within Groups.

Behavioral functioning from program intake to discharge was examined. Subjects in the experimental group (Wraparound) demonstrated improvement in functioning. Total CAFAS scores decreased from 80.59 at program intake to 53.53 by discharge. This 27.06 point drop in scores represents a significant decrease ($p=.066$) in CAFAS scores for subjects receiving Wraparound services. Youth in the control group demonstrated only a small improvement in functioning. Total CAFAS scores decreased from 101 at program intake to 92.50 by discharge. This 8.50 point decrease does not represent a significant decrease ($p=.441$) in CAFAS scores for subjects receiving RTS services.

EXPERIMENTAL AND CONTROL CAFAS INTAKE-DISCHARGE SCORES WITHIN GROUPS (N=37)				
Group (N=37)	Total CAFAS Score at Intake	Total CAFAS Score at Discharge	Difference	Significance
RTS CONTROL (N=20)	101	92.50	8.50	.441
WRAPAROUND EXPERIMENTAL (N=17)	80.59	53.53	27.06	.066

B. Between Groups.

Differences in behavioral functioning between subjects in each group at program intake and discharge were examined. At program intake, control subjects had a Total CAFAS score of 101 whereas experimental youth had a score of 80.59. This 20.41 point difference in intake scores was not statistically significant ($p=.177$). At discharge from the program, control subjects receiving RTS services had a Total CAFAS score of 92.50 whereas experimental youth receiving Wraparound services had a score of 53.53. This 38.97 point difference in CAFAS discharge scores between control and experimental groups represents a statistically significant ($p=.034$) improvement in behavior for youth receiving Wraparound services when compared to those who received RTS services.

EXPERIMENTAL AND CONTROL CAFAS INTAKE-DISCHARGE SCORES BETWEEN GROUPS (N=37)				
TIME	RTS CONTROL (N=20)	WRAPAROUND EXPERIMENTAL (N=17)	Difference	Significance
Total CAFAS Score at Intake	101.00	80.59	20.41	$p=.177$
Total CAFAS Score at Discharge	92.50	53.53	38.97	$p=.034$

In summary, Wraparound was associated with a significant reduction in youth behavioral impairment from intake to discharge ($p=.066$). Wraparound was also associated with significant reductions in overall youth behavioral impairment when compared to RTS services ($p=.034$). RTS services did show small reductions in youth behavioral impairment from program intake to discharge, but these were not statistically significant ($p=.441$) and could likely have been due to chance.

IX. Results: Placement at Discharge

As stated previously, the mission of Stanford Wraparound and Stanford RTS programs are the same: to improve youth and family adjustment and functioning and to return youth to family settings in the community as quickly and effectively as possible. The following is an assessment of placement at discharge for both control and experimental populations. The general placement categories, community and facility, will be analyzed first, followed by a more detailed evaluation of living arrangements.

The Wraparound program was associated with a greater proportion of subjects being placed into community based settings than the RTS program. Seventy one percent of subjects in the Wraparound program were discharged to their parents, kinship, foster care, or independent living. The remaining 29% of subjects were discharged to other residential care facilities, juvenile hall, or they ran away. In contrast, subjects in the RTS program were discharged to community based placements only 40% percent of the time. The remaining 60% of the subjects in the RTS program were discharged to another residential care program, juvenile hall, or ran away. The differences between Wraparound and RTS programs regarding community based placements versus other types of discharge were significant at the $p=.063$ level.

EXPERIMENTAL AND CONTROL PLACEMENT AT DISCHARGE COMMUNITY VS. OTHER (N=37, p=.063)			
Placement at Discharge	RTS CONTROL (N=20)	WRAPAROUND EXPERIMENTAL (N=17)	DIFFERENCE
Community Setting: Birth Parents, Kin, Foster Care, Independent Living	40%	71%	+31%
Other: Residential Care, Juvenile Hall, Run Away	60%	29%	-31%

Analysis of specific living arrangements demonstrates a consistent pattern: Wraparound is associated with discharging higher proportions of youth into more desirable family-based community settings. Twenty-four percent of youth receiving Wraparound services returned to their biological parents compared to only 15% of youth receiving RTS services alone. Wraparound had 12% of its youth placed in kinship care by discharge, whereas RTS had 10%. Wraparound placed 29% of youth in foster care, compared to only 15% of RTS youth. None of the youth receiving RTS services alone went directly into independent living, whereas 6% of Wraparound youth did.

Analysis of youth discharged into less desirable facility-based settings yielded converse results: Wraparound discharged a lower proportion of youth into facility-based settings when compared to the RTS program. Wraparound discharged only 12% of its clients due to youth running away whereas RTS discharged 15%. The same proportions were discharged into other residential care programs, 12% for Wraparound and 15 % for RTS. Only 6% of the Wraparound subjects were discharged into juvenile hall, compared to 30% of subjects receiving residential services.

EXPERIMENTAL AND CONTROL PLACEMENT AT DISCHARGE VARIOUS SETTINGS (N=37)			
Placement at Discharge	RTS CONTROL (N=20)	WRAPAROUND EXPERIMENTAL (N=17)	DIFFERENCE
Birth Parents	15.00%	23.52%	+8.52%
Kinship Care	10.00%	11.76%	+1.76%
Foster Care	15.00%	29.41%	+14.41%
Independent Living	00.00%	5.88%	+5.88%
Residential Care	15.00%	11.76%	-3.24%
Juvenile Hall	30.00%	5.88%	-24.12%
Run Away	15.00%	11.76%	-3.24%

In summary, placement data from the SHC control and experimental populations clearly indicate that youth receiving Wraparound services were far less likely to be discharged into facility settings and more likely to be discharged into community-based family settings than those youth receiving RTS services.

X. Discussion

Stanford Home for Children is a non-profit service provider serving many of Sacramento County's most complex youth and families. A unique moment in the agency's history has occurred, characterized by four events; (1) the creation of the Title IV-E Demonstration Project enabling the flexible use of resources in serving needy complex families, (2) the selection of California, and specifically Sacramento, as a demonstration project site, (3) the selection of University of California Berkley's CSSR as the project evaluator and (4) the selection of Stanford Home as a Wraparound (experimental) and Residential Treatment Services (control) service provider. This unique confluence of events has allowed the same agency to serve randomly selected control and experimental subjects in the same community, at the same time, using well defined but different treatment technologies, common measurement devices and common outcomes. The agency conducted research throughout its participation in the Title IV-E Demonstration Project and is now able to report its findings.

First, while the experimental research model and the controlled conditions were optimal for research purposes, we are compelled to remind readers of the sacrifices made by subjects and their families selected for the control group over the last four years. Most of these children will not get their adolescence back, and during the course of the

Demonstration Project community leaders in Sacramento expressed substantive concerns about “recreating” these experimental conditions in the future. The community concluded that there must be a balance between participating in the development of evidenced-based practices while fulfilling a commitment to already marginalized and disempowered families. Thus, we have a significant obligation to learn as much as possible from these circumstances now: such an opportunity does not occur very often in child welfare and juvenile justice and may not soon occur again.

Second, it is important to note the limited size of our sample. At various points in time, we resisted the temptation to relax the conditions of the experiment. For example, we considered including Wraparound clients admitted to the program while residing in other residential care facilities. This would have increased the experimental group sample size and increased statistical significance for some of our findings. But it would also have introduced variation in the type of initial treatment the Wraparound subjects received. We also appreciate that the limited sample size provided for some significance values slightly above the traditional level of $p=.05$ (Wraparound’s better behavioral functioning outcomes were at a significance level of $p=.034$ and Wraparound’s better placement outcomes were at significance level $p=.063$). For an agency the size of Stanford Home and the experimental conditions, we believe the data to be compelling.

Third, it may be of interest to note that, during the Demonstration Project, RTS underwent significant program reforms designed to help the program function more like Wraparound. In addition to collaboration with their Wraparound colleagues, RTS clinicians were trained in Wraparound practices and started to conduct strength based family inclusive wraparound-like Child and Family Team meetings and interventions for

control group subjects. Individualized planning and resources to engage residents' families were introduced. This may lead one to wonder what the findings would have been if we had allowed the Stanford RTS program to remain unchanged, resisting the adoption of some of the more influential wraparound program principles.

Fourth, Wraparound has been characterized in this research as a specific intervention, or treatment. As much as possible, the context and conditions for the different treatments (Wraparound and RTS) were controlled. Of course, Wraparound is not just a behavioral intervention. When truly implementing a Wraparound program in a community, there is a strong emphasis on system change. One might surmise that Wraparound as an individualized intervention is, at least theoretically, more effective when the community systems and structures support it. This research was conducted during a time when Wraparound was just being introduced to the Sacramento community. Seven years later, the programs within Stanford Home, let alone the mental health, child welfare, and juvenile justice agencies, systems, and institutions, are still in the process of incorporating Wraparound into their cultures and practices. Again, one might wonder what the findings would have looked like if Wraparound was not contending with pre-existing cultures and systems.

XI. Conclusions

Clearly, the flexible use of Title IV-E funds in the form of Wraparound (the experimental child welfare innovation) was associated with more desirable outcomes than the non-waived use of Title IV-E funds in the form of Residential Treatment Services (the standard services) for randomly selected Demonstration Project subjects served at

Stanford Home. Wraparound was significantly associated with a reduction in child impairment from program intake to discharge and was associated with a significantly greater reduction in child impairment when compared to Residential Treatment Services. Wraparound was significantly associated with greater proportions of children being discharged to birth parents, kinship placements, foster care, and independent living. Wraparound was associated with fewer children running away or being discharged to juvenile hall or other residential programs. From the perspective of a non-profit provider determined to implement practices proven to provide better outcomes for families, these findings have contributed to decision-making. The findings have lead Stanford Home to adopt the Wraparound approach and advocate for a funding and regulatory model that facilitates the Wraparound approach. We encourage other service providers who remain skeptical to conduct research and share their results.

XII. References.

Center for Social Services Research, University of California at Berkeley (2004). *Title IV-E Child Welfare Demonstration Project Intensive Services Final Report*. Berkeley, CA: California Department of Social Services.