

## **Chapter Five**

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### **Child Welfare and Foster Care**



# **Factors Related to Custody Relinquishment and Threats of Caretaker Abuse and Abandonment**

**Karen A. Friedman  
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## **Introduction**

Parents trying to raise children who have mental, emotional, or behavioral disorders search for appropriate and effective treatments, services, and supports to help their child. Sometimes, this search forces parents who have exhausted their own financial resources, including health insurance benefits, to transfer custody of their children to state authorities in order to access public funds to pay for necessary mental health care, services and supports. Lee Gutkind (1993) eloquently documented this issue in his book *Stuck In Time*, which chronicles the lives of three Pennsylvania youths with serious emotional disturbances. Current state policies on the issue have been further documented by studies completed by the National Alliance for the Mentally Ill (1999, 2000), the Bazelon Center for Mental Health Law (Giliberti & Schulzinger, 2000), and the U.S. General Accounting Office (2003).

In this quest for services, caretakers may meet resistance from many agencies. When a caretaker persists in demanding services, by such means as refusing to take a child home from a hospital setting without a discharge plan, or refusing to have a child live at home, there may be threats of charges of abuse, neglect or abandonment (Dembner, 2000). In the extreme case, the caretaker may be told that giving up custody of the child is the only way to get these services (Blankenship, Pullmann & Friesen, 1999; Friedman & Walker, 2000; Friesen, Giliberti, Katz-Leavy, Osher & Pullman, 2003; Giliberti & Schulzinger, 2000; McManus & Friesen, 1989).

The practice of relinquishment is the consequence of several factors. Inadequate funding of mental health services and support for children and their families are major reasons families turn to the child welfare system for help. Lack of incentives to develop effective community-based systems of care to help families keep their children with emotional, behavioral, or mental disorders at home, in school, safe, and out of trouble also contributes to the problem. Insufficient mental health benefits in private and public insurance plans cause families to exhaust benefits before the mental health needs of their child are fully addressed. This is especially true when the child's condition is chronic and intensive intervention is periodically required.

There is a growing opinion that custody relinquishment to obtain services is no longer a serious problem. The argument is that at this level of need children are more easily becoming eligible for Medicaid, which pays the cost of residential treatment. In addition, it is argued that caretakers can more easily agree to a voluntary placement without giving up full rights to their child. The purpose of this study was to provide empirical data to determine the extent of custody relinquishment and its associated problems. These important custody issues have rarely been empirically examined with large samples and quantitative methodology.

## **Methodology**

### **Sample**

The overall sample consisted of 176 families residing in the state of Maryland with children hospitalized for mental health issues within the last two years. An initial survey was collected from each family. Of these 176 children, 38% were female and 62% were male. The average age was 12.8 years ( $SD = 3.4$ ). The majority of children were White (90) with 74 children being African-American. Two children were Hispanic; one was a Native American, and seven were biracial.

Upon completion of the screening survey, 48 families qualified for a follow-up telephone interview related to custody issues. Families qualified in three different ways: (a) if they had been told by someone that their child could receive needed services if they relinquished custody; (b) if someone had threatened them with charges of abuse, neglect or abandonment if they did not bring their child home from the hospital; and (c) if they had already lost custody of their child.

### **Measure**

The primary measure used was the Listening & Learning From Families Survey. Focus groups with various families, along with indications from the literature, were used to identify relevant dimensions for this survey. A checklist of items designed to reflect these dimensions was developed and tested for reliability and clinical relevance. This survey provided information on hospital length of stay, type and intensity of services delivered, prescreening living arrangement, placement stability, demographics, and diagnosis. Survey variables were selected for their clinical relevance, low frequency of missing data, and likely impact on the model based on a priori examination.

### **Procedure**

Surveys were distributed in a variety of ways. The bulk of the surveys were mailed from the Mental Hygiene Administration. Surveys were also distributed by local agencies such as the area Core Service Agencies and Departments of Social Services. Advertisements were also placed in local newspapers and the survey was placed on the website of the Maryland Coalition of Families for Children's Mental Health. Completing the Families Survey involved putting a check beside the relevant responses. Families who had been threatened with possible charges, or who had been told to relinquish custody for services, were further questioned through a telephone interview.

### **Results**

A series of cross-tabulations and chi-square tests were used to determine the relationship of various clinical and demographic variables to issues of custody. There were no significant differences in custody issues across race, ethnicity, number of children in the family, gender of the child, and whether the child has any other disability. Non-birth families, adoptive families in particular, were more likely to be confronted with issues of custody relinquishment,  $\chi^2 = 4.47, p < .05$ . Only 7% of the families were told about voluntary foster care placements. Parents who knew about the concept of voluntary placement were often told that it was not an option in their area.

From the 176 completed surveys, 48 families (27%) reported that they were advised to relinquish custody, refused to bring their child home from the hospital, or were threatened with charges of abuse, neglect, or abandonment. This percentage is consistent with data from national surveys conducted in 1989 and 1999. Five of these 176 families (3%) actually lost custody of their child.

Several factors were shown to significantly increase the likelihood that families would confront issues of custody relinquishment including: (a) a large number of hospitalizations for the child; (b) a history of the child physically or sexually abusing others; (c) aftercare services that did not meet the child's needs; (d) reliance on private insurance exclusively or private insurance together with medical assistance; and (e) a general, deteriorating condition of the child.

Using demographic, clinical, and insurance variables derived from the Listening & Learning From Families Survey, a stepwise logistic regression was used to develop a model to predict whether or not a family would experience a custody threat. A series of 11 predictor variables were selected for their clinical relevance, low frequency of missing data, and likely impact on the equation based on the preceding chi-square analyses.

Four of the original predictors were selected for inclusion in the model. Caretakers' Perception of their child's readiness to come home, and Number of Hospital Visits contributed the most to the prediction equation, while Type of Insurance and Family Unit played a moderate role in the equation. Using these four predictors, the logistic regression results shown in Table 1 generated a statistically significant model of the family likely to have child custody issues,  $\chi^2 = 50.68$ ,  $df = 11$ ,  $p < .001$ , suggesting that the predictors classify better than the base rate. The overall accuracy of the model was 83.33%.

**Table 1**  
**Final Model Based on Stepwise Logistic Regression Equation**

<i>Variable</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>r</i>	<i>p</i>	<i>Odds</i>
Hospital Visits	.34	.13	6.62	1	.17	.01	1.41
Ready Home			9.52	2	.18	.01	
Ready Home(1)	6.46	47.22	.02	1	.00	.89	641.60
Ready Home(2)	8.05	47.22	.03	1	.00	.86	3140.01
Insurance			6.58	3	.06	.09	
Insurance(1)	-2.01	1.39	2.08	1	-.02	.15	.13
Insurance(2)	-.31	1.44	.05	1	.00	.83	.74
Insurance(3)	-9.03	33.12	.07	1	.00	.79	.00
Family Unit			12.59	5	.13	.03	
Family Unit(1)	6.13	99.63	.00	1	.00	.95	460.45
Family Unit(2)	6.79	99.64	.00	1	.00	.95	885.73
Family Unit(3)	8.49	99.63	.01	1	.00	.93	4856.51
Family Unit(4)	-.34	140.90	.00	1	.00	.99	.71
Family Unit(5)	7.70	99.63	.01	1	.00	.94	2200.21
Constant	14.00	110.27	.02	1		.90	

## Discussion

Advising families to relinquish custody, or to leave their child in the hospital or residential facility, was found to be a common practice. Most of the families in this study could not bring themselves to give up custody. Instead they brought their children home under pressure and threat of losing custody. Families were most likely to consider custody relinquishment when one or more of the following factors were present: (a) repeated hospitalizations, (b) children were being cared for by non-birth families including adoptive families, (c) the family felt the child was not ready for discharge from the hospital, and (d) the family had private insurance.

The impact of caring for these children was financially devastating to the families. Many caregivers lost jobs or could only work part time as a direct result of their child's intensive needs and repeated crises. Families also expressed exhaustion, depression and hopelessness for themselves. They also expressed grave concerns for the well being of their other children who were less demanding, but who consequently received less of their parent's time, energy and family resources.

The children involved in this study had lengthy histories of serious, chronic mental health disorders with early onset of serious difficulties. In spite of a variety of services and numerous hospitalizations, the children's behaviors deteriorated. However, families demonstrated incredible perseverance and often reported going to five or more agencies in search of assistance. Safety in the home and protection of siblings were the key reasons families stated their child could not return home, and why caretakers risked charges of abandonment for refusing to pick up their child from the hospital. Finally, caretakers felt they were at the mercy of their insurance companies. They had limited choices of therapists, limits on the number of hospital days covered, and costly co-payments for medication and for treatment, especially when therapy was required several times a week.

In summary, custody relinquishment and the underlying inability of families to obtain necessary mental health services for their children are major policy issues that affect the well being of children and families and which strains public agencies, providers and public resources. These issues warrant the highest priority of public policymakers.

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# **Predictors of Parent-Child Reunification and Behavioral Health Services Use & Cost for Children in Foster Care**

**Marion A. Becker  
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## **Introduction**

Florida's foster care system has been shouldering an increasing burden for over a decade. The number of children in foster care increased 35% during the 1990s, and the estimated median length of stay for a child entering foster care was 14.1 months in fiscal year (FY) 2000. Florida's rate of reunification for children in foster care lags behind the rest of the country, with only 45% of foster care children reunified with their custodial parents within 12 months (compared to the national standard of 76%) (Brown, Lipien, Trinidad, & Yampolskaya, 2001). Additionally, children in the foster care system (and their custodial parents) have much higher need for, and subsequent use of, mental health and substance abuse treatment services than children not involved in the foster care system (Halfon, Berkowitz, & Klee, 1992; Harman, Childs, & Kelleher, 2000; Kortenkamp & Ehrle, 2002; Takayama, Bergman, & Connell, 1994). Understanding the factors associated with successful reunification and the characteristics associated with behavioral health services use for this population will enable the Agency for Health Care Administration and the Department of Children and Families (DCF) to more appropriately target interventions that may lead to shorter lengths of stay, higher rates of successful reunification, and lower health services costs for foster care children and their custodial parents.

The purposes of the research reported here were to: (1) identify the relevant predictors of successful parent-child reunification after an occurrence of documented child maltreatment and foster care placement, (2) examine the use and cost of behavioral health services for children in Florida's foster care system, and (3) explore the impact of parent-child reunification on the pattern and cost of behavioral health services used.

## **Method**

Data from DCF's Office of Family Safety Client Information System (OFS-CIS) were used to identify children who had an occurrence of documented child maltreatment and foster care placement. The predictor study population included Florida Medicaid-enrolled children with a report of maltreatment who were placed into and exited foster care between July 1998 and June 2001, and their custodial parents. Child and parent characteristics and health services use and cost were derived from Medicaid administrative data after matching OFS-CIS and Medicaid data. In the service use study, we compared service use and cost for the following study and comparison groups: (a) foster care vs. non-foster care children, (b) successfully-reunified vs. non-successfully reunified children and (c) successfully-reunified vs. non-successfully reunified children with a diagnosis of serious mental illness. Also, an analysis of service use and cost before, during, and after foster care placement was performed on the study population.

## **Results**

The strongest predictors of successful reunification in this study sample were the child's district of residence and the child's Medicaid eligibility status. The probability of successful reunification ranged from 6% for children in DCF District 11 (Miami) to 63% for DCF District 15 (Port St. Lucie). Children who were enrolled in Medicaid before their foster care placement (Type IV-E) were more than three times less likely to be successfully reunified than children who became eligible for Medicaid benefits because she or he was placed in foster care.

Our examination of behavioral health services use and cost yielded some interesting observations. Children in foster care used significantly higher amounts of inpatient, day treatment, case management, counseling, and other outpatient services than Medicaid-enrolled children not in foster care. Total

behavioral health services costs for children in foster care were over eight times higher (\$210 per child per month versus \$26 per child per month for children not in foster care). Children in foster care used more behavioral health services during their foster care placement than they did before foster care placement and after foster care discharge.

Parent-child reunification had a modest relationship with behavioral health services use and cost. Children who were successfully reunified were equally likely to have used one or more services as children who were not successfully reunified. Non-reunified children who used any behavioral health services received a significantly larger quantity of services than reunified children who used any behavioral health services, as reflected in higher average costs per month (\$204 per child per month versus \$127 per child per month). This difference in use and cost was primarily attributable to higher use of inpatient and outpatient services by children who were not successfully reunified.

## **Discussion**

There are several limitations to the study findings. The reunification results cannot be generalized to all children in foster care because the study sample was limited to children who could be matched to their custodial parents in the Medicaid data, and these families may be systematically different from those where children and parents could not be matched. There also are limitations associated with the use of administrative data. In particular, diagnosis information is not always accurately reported in the Medicaid data, and the OFS-CIS database lacks valid and reliable measures of maltreatment severity, which is often strongly related to behavioral health services need and use, and might be strongly related to the likelihood of reunification.

Despite these limitations, the study findings have important implications for policymakers. The district level differences in rate of successful reunification suggest that a “one size fits all” approach to improving the foster care system may not be the optimal approach. Additional factors that may help explain district differences in reunification include district-level demographic characteristics, Dependency Court characteristics, rates of poverty, single parenthood, and the quality and design of child welfare services provided. Investigation of these factors will be the focus of subsequent studies.

Our findings regarding behavioral health services use and cost are consistent with previous studies of children in foster care. They support the need for future research on behavioral health service utilization and associated need for mental health intervention. Given the known, long-term, negative consequences for adults who experienced the foster care system as children, it is essential to both assure the provision of needed behavioral health services and better understand the role of child welfare services in accessing needed services for children and their custodial parents involved in the child welfare system.



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## **Symposium**

# **Community-Based Residential Care for Youth: “Real World” Implementation and Outcomes**

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## **Symposium Introduction**

**Elizabeth M. Z. Farmer**

This symposium presented recent findings from an NIMH-funded study (MH057448-04) of Treatment Foster Care (TFC) and Group Home (GH) care in a state-wide representative sample. Presentations focused on variations in the implementation of care and outcomes.

TFC and GHs are the two most common community-based residential options for youth with severe emotional disturbance (SED). TFC is regarded as a promising evidence-based practice for youth, but little is known about “real world” implementation or outcomes of TFC.

The papers in this symposium provide emerging information on these issues by focusing on TFC as it is widely implemented, in comparison to GH care. The authors discuss current research and practice implications of their findings. The first paper discusses the study methodology and goals as well as the overall conceptual and analytic model that frame the subsequent papers. The second paper examines variations in TFC were in the context of national standards of care developed by the Foster Family-based Treatment Association. Patterns and differences of additional service use and psychotropic medication use by youth in these placements are addressed in the third paper. The final paper includes analyses of factors that influence outcomes (i.e., characteristics of youth and treatment parents, agency-level variations in implementation, in-home implementation, and related services) in the two settings. This symposium concludes with a discussion of the findings in terms of implications for research and practice, with a focus on the role of such research in advancing the evidence base for children’s mental health interventions.

## **Community-based Residential Care for Youth: “Real World” Implementation and Outcomes**

**Elizabeth M. Z. Farmer, Charlene Allred, Alfiee M. Breland-Noble, Eric B. Elbogen & Barbara J. Burns**

### **Introduction**

Treatment Foster Care (TFC) and Group Homes (GHs) are the two most common community-based residential placements for youth with mental health problems. However, the literature is sparse on real-world implementation or outcomes of these widely used settings. While findings from model TFC and GH programs suggest that each can produce desired changes (Chamberlain, 1994; Chamberlain, 2002; Chamberlain & Moore, 1998; Reddy & Pfeiffer, 1997), very little research has directly compared implementation or outcomes of these two adjacent levels of care. The best work in this area has been conducted by Chamberlain and colleagues at the Oregon Social Learning Center. This work has revealed quite different treatment philosophies in the two settings; a peer milieu approach predominates in GHs, while an emphasis on positive adult-child relationships underlies TFC (Chamberlain, 2002; Chamberlain, Ray, & Moore, 1996; Chamberlain & Reid, 1998).

Results of these studies showed that youth in TFC were less likely to associate with deviant peers and were more likely to experience discipline/consequences for problem behaviors (Chamberlain, 2002; Eddy & Chamberlain, 2000). Both of these findings related to improved outcomes. Findings from Chamberlain and colleagues also showed more rapid improvement for youth in TFC compared to youth in GHs. However, regardless of setting, a strong relationship with an adult in the setting was related to

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### **Authors**

**Farmer et al.**

**Allred et al.**

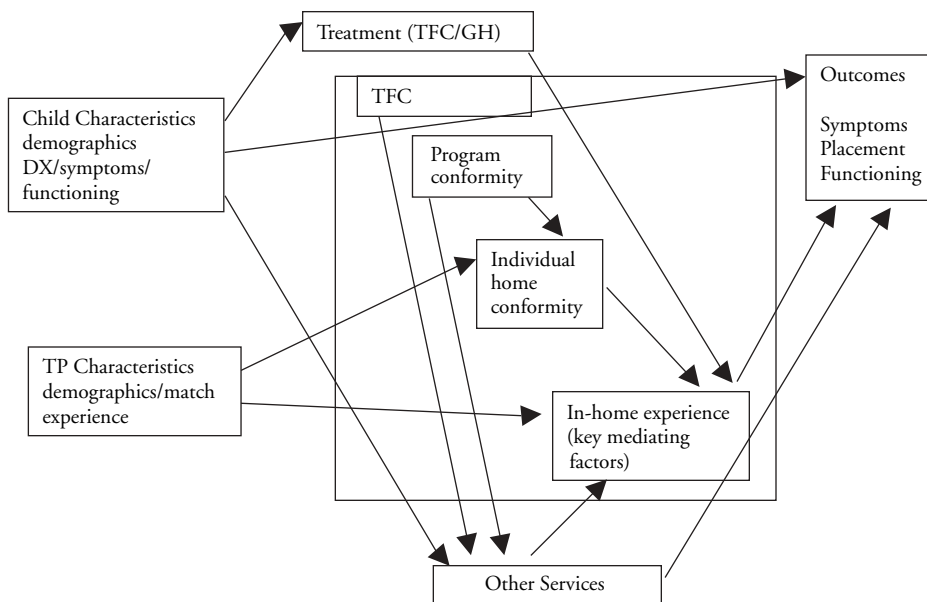
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more positive outcomes (Eddy & Chamberlain, 2000). These findings provide the starting point for the current study of TFC and GHs in "real world" practice.

This presentation provides an overview of the study methodology and the conceptual model guiding analyses (see Figure 1). Data come from two state-wide studies that investigate therapeutic foster care and group home care for at-risk youth residing in North Carolina. Initially, the purpose of the research was to examine the use, implementation, and effectiveness of TFC; it was later expanded to include a comparison group of youth residing in group homes. These studies focus on youth with psychiatric diagnoses and aggressive behavior who resided in TFC and GHs.

**Figure 1**  
**Overall Model**



## Study Design

The studies, "Therapeutic Foster Care In SOC," and "Assessing Effective Community-Based Care," were conducted state-wide in North Carolina, focusing on youth in the Willie M. program. The Willie M. program, which resulted from a class action law suit in the state, provides an ideal framework for conducting such work for a number of reasons.

First, the program identifies and treats youth who have a psychiatric diagnosis and aggressive behavior. Comparison between Willie M. class members and youth in other parts of the nation show that Willie M. youth are similar to youth with severe emotional disturbance (SED) who are being served by other systems of care throughout the nation. Second, it had a well-developed management information system that made it possible to identify youth who received specified services (i.e., TFC or GH) on a monthly basis statewide. Third, the Willie M. program provided centralized payment for services and adherence to system-of-care principles, but relied on locally run service provision. Hence, there was consistent availability of funding and approach to treatment, but tremendous variation in how services were delivered. Therefore, this framework provided a unique and ideal setting for a large-scale study of implementation and outcomes of community-based treatment.

### Sample and Data Collection Procedures

The Willie M. Management Information System identified youth who resided in TFC or GHs during the designated recruitment periods. Because the initially funded study included just TFC, recruitment for youth in TFC occurred between June 1999 and May 2001. The GH sample included youth who resided in group homes between January - June 2001. The TFC sample includes youth ( $n = 184$ ) served in 43 TFC agencies and the GH sample includes youth ( $n = 120$ ) served in 45 group homes. Youth in the two settings were comparable on a range of domains, (see Table 1) including mean age, racial composition, mental health and functional status measures. Youth in the two placement types differed significantly on sex, custody, and length of time in placement at baseline.

The sampling approach included all youth who resided in each setting when recruitment began, as well as youth who entered the setting during the remainder of the recruitment process. Therefore, the approach includes both prevalence and incidence approaches to sampling. This method provides a sample that is cross-sectionally accurate and allows analyses of youth with the full range of lengths of stay in the setting. For both samples, the participation rate was 75% of eligible youth.

Primary data were collected in-person and through telephone interviews. At study entry, in-person interviews were conducted with a treatment parent or group home staff member and the youth (separately). The interviews covered a wide range of information about youths' problems, strengths, functioning, relationships with adults and peers, service use, prescription drug use, and implementation of treatment within the GH or TFC home. While the youth remained in the setting, the adult respondent was contacted every four months via telephone to complete a brief follow-up measure to assess changes across time. In-person interviews were also completed around the time of discharge. Post-discharge data were collected at 6, 12, and 18 months via telephone interview with the youths' new primary caregiver (or with the youth, if they had aged out or were living independently).

Prior to beginning interviews with youth and caregivers, interviews were conducted with agency directors (for the TFC agencies only). Using the Willie M. MIS, we identified 46 agencies that were providing TFC to Willie M. youth. Of these, 42 (91%) agency interviews were conducted. These interviews assessed agency-level conformity to National Standards of Care and collected descriptive information about the program and its practices/policies.

### Results

Findings show that TFC as it is widely practiced differs markedly from its evidence-based model. For example, the evidence-based TFC model is designed for short-term care (approximately 6-9 months), while youth in our sample of TFC homes remained in care for an average of 22 months, with 46% remaining in care for longer than 24 months. We also found less intensive supervision of treatment parents and less emphasis on proactive behavioral strategies. Additionally, there was tremendous movement of youth between TFC and GHs, adding further support to the similarities between the two groups of youth served in these settings. For example, 46 % of youth lived in a group home immediately prior to TFC; among youth discharged from TFC within 12 months, 38% moved to GH (Farmer, Wagner, Burns, & Richards, 2003).

**Table 1**  
Sample Description

	TFC ( $n=184$ )	GH ( $n=120$ )
Age	14.1	14.3
Sex (male) **	74%	87%
African American	40%	47%
White	55%	49%
CBCL Total T Score	65.3	64.2
PDR	5.2	6.1
BERS	86.6	84.5
IQ	81.9	80.6
Custody of State *	59%	45%
Time in setting at baseline *	16 months	13 months

\* $p < .05$ , \*\* $p < .01$

## Conclusion

Both TFC and group homes serve youth with complex needs and service trajectories. Services research on TFC and GHs need to account for a wide range of potentially influential factors. The presentations that follow present findings on the variations in the implementation of TFC, differences in service use by youth and psychotropic drug use by youth in the two settings, and potential factors that may be related to outcomes for these youth.

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## **Variations in Treatment Foster Care Implementation**

**Charlene A. Allred, Elizabeth M. Z. Farmer, Barbara J. Burns, & Melanie S. Dubs**

### **Introduction**

Treatment Foster Care (TFC) is a family-based residential treatment option for youth with serious mental health problems. Care and treatment are provided in the homes of specially trained Treatment Parents. A conservative estimate suggests that at any point in time, TFC serves at least 11% of youth who are in out-of-home care for psychiatric problems (Chamberlain, 2002; Farmer, Burns, Dubs, & Thompson, 2002). This amounts to at least 1,200 youth served by TFC on any given day and over six million client days per year, at a cost of at least one-half billion dollars. Moreover, TFC is one of very few evidence-based interventions for youth with the most serious problems (U.S. Department of Health and Human Services, 1999; Burns, Hoagwood, & Mrazek, 1999).

The evidence base for TFC suggests that it can produce desired changes for youth, both during treatment and for some period after discharge (Chamberlain, 1994; Chamberlain, 2002; Chamberlain & Moore, 1998; Reddy, 1997). The strongest supporting evidence for TFC comes from well-implemented and carefully monitored programs of the Oregon Social Learning Center (Chamberlain, 1994; Chamberlain, 2002; Fisher, 2000). This paper examines an approach to operationalize TFC implementation and examines variations in implementation of TFC. Assessing both conformity and variation is a prerequisite step to assessing and interpreting the effectiveness of TFC in real-world settings.

### **Methods**

The implementation of TFC was operationalized by examining conformity to the national standards of care developed by the Foster Family-Based Treatment Association (FFTA; (Foster Family-Based Treatment Association, 1995). There are three categories of FFTA Standards: (1) *Program*, (2) *Treatment Parent*, and (3) *Children, Youth, and Families*. The Program standards assessed domains such as documentation of services delivered, adequacy of program evaluation, and staff members' training, supervision, qualifications, and caseloads. Treatment Parent standards included parent qualifications, pre-service and in-service training and support, treatment home capacity, treatment parent roles, record keeping, and support services. The Children, Youth, and Families standards focused on pre-placement activities, access to staff, treatment planning, transition and permanency planning, and family involvement. The data were obtained through interviews with the program directors. Data from the interview were used to code 52 items distributed across the three performance domains reflected in the FFTA Standards.

### **Results**

Results are based upon complete data collected from 42 (91%) of the 46 identified TFC programs (Farmer, Burns, Dubs, & Thompson, 2002). The agencies included 21 public programs and 21 private programs, of which 10 were not-for-profit and 11 were for-profit. The number of licensed homes ranged from 2-235 across the participating agencies. Programs varied in how long they had been in existence, with private non-profits being the oldest (average tenure 13 years) and for-profits being the most recently created (average 4 years). Only two of the responding programs were stand-alone TFC agencies. All other agencies provided TFC along with other services for troubled youth.

The data from agency directors first were used to assess overall conformity (the Total Score of the subscales) as well as individual conformity on each of the three subscales of the FFTA Standards of Care. Interviewers evaluated agencies' level of conformity to the standards as (0) No Conformity, (1) Partially Conformity, or (2) Full Conformity. Inter-rater reliability was  $\geq .90$  for 45 of 52 items. The potential range in conformity scores was 0-104, with higher scores indicating greater conformity. The observed range was 53-91 ( $M = 69$ ,  $SD = 8.2$ ), indicating fair to good conformity among agencies.

In terms of the subscales of the FFTA Standards of Care, there was a high correspondence between conformity on the Treatment Family subscale and the Children, Youth, and Family subscale ( $r = .63$ ,  $p < .0001$ ). However, conformity on the Program subscale was not significantly related to the other subscales (see Table 1).

**Table 1**  
FFTA Standards Review Instrument Psychometrics

Scale	Mean	Standard Deviation	Coefficient Alpha	Subscale Correlations		
				Program	Parent	Child
Program	1.34	.27	.64	—	-.04	.09
Treatment Parent	1.39	.20	.69	—	—	—
Children, Youth, & Families	1.22	.30	.57	—	.63*	—

To examine the concordance on the individual subscales, the mean conformity score was determined for each subscale, and the programs were dichotomized as performing above or below the mean on each of the three subscales. Four categories of programs resulted: (a) those that were below the mean on all three subscales ( $n = 7$ ); (b) those that were above the mean on one subscale ( $n = 11$ ); (c) those that were above the mean on two subscales ( $n = 15$ ); and (d) those that were above the mean on all the subscales ( $n = 9$ ). This categorization provided another way to assess program conformity and reflected the variation in implementation of TFC across the 42 participating programs.

Multivariate analyses were completed to examine program characteristics associated with conformity (see Table 2). The findings indicated that larger programs showed higher conformity on the Total score ( $r = .47$ ,  $p < .01$ ) and on the Children, Youth, and Families subscale ( $r = .48$ ,  $p < .01$ ). For-profit agencies showed significantly lower conformity than non-profit or public agencies on three of the four scores: Total score ( $r = -0.67$ ,  $p < .01$ ); Treatment Parent subscale ( $r = -0.61$ ,  $p < .01$ ), and Children, Youth, and Families ( $r = -0.68$ ,  $p < .01$ ). These analyses confirmed that the Program subscale was quite distinct from the Total score or other subscales in that multivariate models explained only 5% of variance in the Program subscale versus 22-37% of variance on the Total score and other subscales.

**Table 2**  
Relationships Between Program Characteristics  
and Level of Conformity to Standards<sup>1</sup>

	Overall Composite	Program Standards	TP Standards	Child, Youth, Family Standards
Age of Program (years)	-0.32	-0.20	-0.23	-0.18
Number of licensed homes	0.47 **	0.23	0.28	0.48 **
Public TFC program	-0.08	-0.08	-0.12	-0.04
For-profit TFC program	-0.67 **	-0.22	-0.61 **	-0.68 **
Model R <sup>2</sup>	0.33	0.05	0.22	0.37

<sup>1</sup> Coefficients are standardized parameter estimates, + $p < .05$ , \* $p < .10$ , \*\* $p < .01$ , \*\*\* $p < .001$

## Conclusions

Using the FFTA standards as a measure of TFC program implementation requires further refinement. The subscales show high face and content validity as well as good inter-rater reliability and internal consistency. There is a need, however, to examine subscale independence as well as concurrent and predictive validity. There is significant variation in the implementation of TFC across North Carolina agencies. Program size and for-profit ownership status were associated with observed variation. Future



efforts will attempt to assess additional factors, such as the work environment, staff participation and involvement in decision-making, and the concordance between staff at various levels in their perceptions of the level to which standards of care are being followed. With the consideration of these additional factors, there may emerge a more complete picture of program level processes that may also impact adherence to established standards of care.

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## Service Use by Youth in Treatment Foster Care and Group Homes

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### Introduction

Youth served in Treatment Foster Care (TFC) and Group Homes (GHs) present a myriad of emotional and behavioral problems. As such, these youth typically require multiple ancillary services including services provided by mental health, educational, general medical, juvenile justice and child welfare services. Although the current literature provides an emergent picture of mental health service use among youth of varied backgrounds that can be useful in generalizing to mental health service use among youth in specialized placements, little published research specifically examines patterns of mental health (and other) service utilization among youth in specialized placements like TFC and GHs. The findings addressed in this paper offer new information on the specific types, volume and correlates of mental health and other services used by youth while in these settings.

### Method

Data came from an NIMH-funded study of Treatment Foster Care (TFC) and Group Home (GH) care in North Carolina. The participants in the study were Willie M. class members who resided in TFC and GH between 1999 and 2001.

Data were collected at baseline (i.e. point of entry into the study), every four months thereafter, and at the time of the youth's discharge from placement. TFC and GH parents and youth were the respondents. Youth and parent interviews were conducted separately to ensure confidentiality. Parent interviews included reports on the home composition, the youth's behavior and functioning, implementation of GH or TFC practices, and any use of additional services. Youth's functioning and clinical status data were collected with the Behavioral and Emotional Rating Scale (BERS; Epstein, 1998), the Child Behavior Checklist (CBCL; Achenbach, 1991), and the Parent Daily Report (PDR; Chamberlain & Reid, 1987). Service use data were collected from treatment and group home adults using the Child and Adolescent Services Assessment (Ascher, Farmer, Burns, & Angold, 1996; Farmer, Angold, Burns, & Costello, 1994).

## Results

As shown in Table 1, findings revealed a number of commonly used services across TFC and GH. These included case management, school guidance counselors/psychologists, special educational classes, and vocational services. For some services, however, there were substantial differences in rates of use by youth in the two settings. Specifically, youth in TFC were more likely to use respite care (TFC = 49% vs. GH = 8%); in-home counseling or crisis services (TFC = 19% vs. GH = 10%); see a medical doctor (TFC = 14% vs. GH = 10%); participate in an after school program (TFC = 11% vs. GH = 1%); and have a mentor or use therapeutic recreational services (TFC = 29% vs. GH = 16%). GH youth were more likely than TFC youth to serve time in a detention facility (GH = 15% vs. TFC = 7%); have a probation officer (GH = 39% vs. TFC = 21%); work with a psychologist, psychiatrist, or therapist (GH = 93% vs. TFC = 81%); visit an emergency room (GH = 9% vs. TFC = 4%); and attend a special school (GH = 34% vs. TFC = 18%).

We next calculated the volume of services used by the two groups by reviewing the mean number of client visits to outpatient settings and comparing that to the mean number of days clients remained in inpatient settings. Results indicated no statistically significant differences between TFC and GH youth on either variable. Hence, while there were differences in access or utilization between the groups, once a youth was receiving a particular service, the volume of service did not appear to differ for youth in TFC and GHs.

To examine characteristics of youth and setting that might be associated with service use, a series of dichotomous proxies representing sector type were regressed on demographic and clinical covariates (shown in Table 2). In each instance, two sets of models were estimated: the first used setting alone as the independent variable and the second added age, gender, race, CBCL Total score, and custody status as covariates. Due to the difficulty of running multivariable models with small cells, we did not run models on outcomes where fewer than 10% of either group received the service. Youth in GHs were two to three times as likely to receive services in special schools, juvenile justice or as outpatients. Conversely, youth in GHs were approximately half as likely as youth in TFC to receive in-home counseling or mentor services.

After including covariates for age, race, gender, and CBCL Total score (Model 2), the significant effect of setting remained for four of the examined services, with in-home counseling no longer retaining significance. Although use of juvenile justice was significantly associated with older age and African American race, and specialty mental health use was associated with higher CBCL scores, the addition of covariates in Model 2 did not substantially improve the model fit as determined by increments in -2 log likelihood scores.

## Conclusions

Youth in TFC and group homes received a wide variety of additional services while residing in these settings. On average, youth received approximately five additional services during the focal four-month period. Nearly all youth in both settings received outpatient therapy and case management. Where there were differences in service patterns between the two groups, youth in TFC were more likely to

**Table 1**  
**Service Use During Preceding 4 Month Period**

Service Type	TFC (n=184)	Group Home (n=120)	difference in rates of use $\chi^2, p$
<i>Specialty Mental Health</i>			
Inpatient psychiatric care	6%	8%	
Residential treatment unit	1%	1%	
Day hospital or day treatment program	2%	3%	
Outpatient drug/alcohol clinic	2%	2%	
Therapist, psychologist, psychiatrist	81%	93%	$\chi^2=8.74, p < .003$
Respite care	49%	8%	$\chi^2=54.59, p < .0001$
Case management	90%	96%	
In home counseling or crisis services	19%	10%	$\chi^2=4.8, p < .03$
Mentor, therapeutic recreational services	29%	16%	$\chi^2=6.50, p < .011$
<i>Education</i>			
Special School	18%	34%	$\chi^2=9.71, p < .002$
School guidance counselor, psychologist	29%	27%	
Special class	50%	40%	
Resource room	24%	18%	
Aide or shadow	33%	23%	
Before or after school program	11%	1%	$\chi^2=11.63, p < .001$
Vocational Services	12%	14%	
<i>General Medicine</i>			
Medical doctor	14%	10%	
Hospital emergency room	4%	9%	
<i>Social Services</i>			
Department of Social Services	1%	4%	$\chi^2=4.33, p < .04$
<i>Juvenile Justice</i>			
Detention center, training school, jail	8%	15%	$\chi^2=4.09, p < .04$
Probation officer, court counselor	21%	39%	$\chi^2=11.18, p < .001$

**Table 2**  
**Logistic Regression Results for Services Through Significant Service Sectors**

	Education: Special School		Juvenile Justice		Outpatient Mental Health		In-Home Counseling/Crisis		Mentor/Therapeutic Recreation	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Setting: Group Home vs. TFC	2.34** (1.36,4.02)	2.14* (1.14,4.04)	2.24** (1.35,3.70)	2.18** (1.19,3.98)	2.64* (1.04,6.72)	3.83* (1.17,12.50)	.45* (.22,.93)	.59 (.26,1.36)	.47** (.26,.85)	.45* (.23,.88)
Sex: Female		1.18 (.54,2.57)		.43 (.18,1.06)		1.02 (.32,3.29)		1.61 (.67,3.88)		1.25 (.59,2.65)
Race: African American		1.16 (.61,2.20)		2.02* (1.08,3.78)		1.51 (.56,4.04)		2.46* (1.10,5.51)		1.56 (.82,2.93)
Age: years		1.02 (.90,1.16)		1.17* (1.02,1.33)		.70** (.53,.91)		.87 (.75,1.01)		1.04 (.91,1.18)
Custody: Dept. of Social Services		1.02 (.99,1.05)		.55 (.30, 1.02)		.79 (.29,2.18)		1.01 (.46,2.21)		.62 (.33,1.17)
CBCL Total		1.13 (.61,2.12)		1.02 (1.00,1.05)		1.04* (1.00, 1.08)		1.05* (1.00,1.09)		1.02 (.99,2.65)

Note. Numbers in table are odds ratios. Numbers in parentheses are Confidence Intervals.  
 \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

receive community-based, individualized services (e.g., in-home counseling, after-school programs, mentor) while youth in GHs were more likely to receive more restrictive services (e.g., detention facility, probation officer, special school). Regarding medical services, there was also evidence of more proactive services for youth in TFC (e.g., more likely to have visited a medical doctor) and more reactive services for youth in GHs (e.g., more likely to have visited an emergency room).

The effect of residential setting on service use appeared to operate primarily at the level of access or linkages. While youth in the two settings experienced different types of services, once enrolled in a particular service, youth in GHs and TFC received a similar volume of services. Differences in types of services were not explained by characteristics of the youth who received the services, as effects of setting on service type remained the net of clinical and demographic covariates (with the exception of in-home counseling). For outpatient mental health services, the effect of group home placement increased when individual-level factors were taken into account (from and odds ratio of 2.6 to 3.8).

Setting effects on service use were particularly striking given the overall comparability of youth who reside in these settings. Demographic factors, symptoms, behavior, and strengths did not vary by sector. The latter result is not surprising, given previous work (Farmer, Wagner, Burns, & Richards, 2003) that revealed considerable movement among youth between GHs and TFC.

The current work suggests that these residential placements operate within an extensive system of care for serving youth. Youth in these settings receive a wide variety of services beyond their residential placement. Some of these (e.g., outpatient therapy and case management) are so common that they may be seen as part of the “bundle” that comprises such residential treatment. Others, however, vary substantially both within and across settings.

While research has emphasized variations in treatment within and between TFC and GHs (Chamberlain, Ray, & Moore, 1996) there is little emphasis or information about variations (within or between TFC and GHs) on associated services in the broader child-serving sphere. It is possible that such services may be instrumental in understanding and explaining effectiveness and variations in outcomes between and within these settings. It is also possible that current concerns about iatrogenic effects of GHs may be influenced by concurrent receipt of these associated services (e.g., detention facilities, probation officers, special school) (Dishion, McCord, & Poulin, 1999). Understanding and disentangling these effects is essential for developing, delivering, and evaluating the most effective services for youth.

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## **Use of Psychotropic Medications by Youth in Treatment Foster Care and Group Homes**

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### **Introduction**

The use of psychotropic drugs to treat emotional and behavioral disorders in youth has increased significantly since the mid-1980s (Zito et al., 2003). Along with this trend, polypharmacotherapy has experienced a similar increase among youth receiving psychotropic medications (Olfson, Marcus, Weissman, & Jensen, 2002; Safer, Zito, & dosReis, 2003). Despite this, little research has examined prescribing practices for children and adolescents (Jensen et al., 1999). Specifically, the current literature regarding pediatric psychopharmacology (as compared to adult psychopharmacology) is limited; even less is known about psychopharmacology for youth most at risk of serious psychopathology, such as those in out-of-home residential placements (Connor, Ozbayrak, Kusiak, & Caponi, 1997). Thus, the research base (including evidence and practice) for psychopharmacology for youth in out-of-home residential care is limited (Stroul & Friedman, 1986; Stroul, 1993).

This paper presents psychotropic medication use from a study of youth in two out-of-home treatment settings, Treatment Foster Care (TFC) and Group Homes (GHs). The types and rates of psychotropic drug use are detailed, and possible factors associated with pediatric psychopharmacology and polypharmacy are explored.

### **Method**

#### **Sample and Procedure**

Data come from an NIMH-funded study of TFC and GH care in the state of North Carolina. Therapeutic foster parents, GH staff, and youth provided informed consent and assent before involvement with the study. The sample included 304 youth; 184 in TFC and 120 youth in GHs. Youth in the two settings were similar in a range of areas including mean age (TFC = 14.1 years; GH = 14.3 years), racial composition, mental health and functional status measures, yet differed significantly by gender (TFC = 74% male vs. GH = 87% male;  $\chi^2 = 6.59$ ,  $p < .01$ ).

TFC and GH youth and parent respondents completed in-person interviews at study entry and near the time the youth was discharged from his or her respective placement. To protect confidentiality, interviews were completed separately. Data were collected at baseline (i.e. point of entry for youth) and every four months thereafter from the TFC and GH service agencies, Treatment Foster Parents/Group Home staff and youth.

During in-person interviews with Treatment Parents and GH staff, investigators asked detailed questions about prescribed medications the youth were taking for their emotional and behavioral problems. Respondents provided the name of medications taken in the last four months, the dosage, and whether the youth was still taking the medication. Up to four medications were recorded based on parent or group home staff report. After detailed information was collected, medications were coded into the following six broad categories: Stimulants, Antidepressants, Antipsychotics, Mood Stabilizers, Anxiolytics, and Others.

#### **Measures**

The interview protocol also included a number of measures. The Child Behavioral Checklist (CBCL; Achenbach, 1991) and the Brief Psychiatric Rating Scale for Children (BPRS-C; Lachar et al.,

2001) were used to assess functioning and clinical status. The BPRS-C psychotic subscales for fantasies, hallucinations and delusions were used for the antipsychotic analysis and the BPRS-C hyperactivity subscale was used for the mood stabilizer analysis.

## Results

**Number of psychotropic medications.** Results reveal that 67% of TFC youth and 77% of GH youth were taking at least one psychotropic medication. Approximately 20% of youth in both settings took just one psychotropic medication and 25% of youth in both settings took two medications. One difference was that 15% of youth in GH took four or more medications compared to 6% of youth in TFC. Overall, chi-square analyses demonstrate a trend toward youth in TFC being less likely to be prescribed medications ( $\chi^2 = 3.40, p = 0.07$ ) and to take fewer medications than youth in GH ( $\chi^2 = 9.10, p = 0.06$ ).

**Predictors of medication use.** Stepwise logistic regression was used to determine predictors of whether a youth was taking any medications (see Table 1). In the first step, placement (i.e., TFC = 0 or GH = 1) was entered and revealed a modest association with taking any medications ( $OR = 1.63, p = 0.07$ ) such that youth in GHs were somewhat more likely than youth in TFC to be taking medication. The second step involved entering demographic variables which revealed that White youth ( $OR = 1.89, p = 0.02$ ) and youth under 13 years of age ( $OR = 0.14, p = 0.001$ ) were significantly more likely to be taking psychotropic medications. In the third step, clinical information was entered with participants placed into groups based on CBCL scores. Specifically, the groups consisted of youth with elevations on Externalizing Only, Internalizing Only, on Both Subscales, or on Neither Subscale. The Neither (i.e. no elevations) group served as the control group for the logistic regressions that followed. Placement, age, and race remained significantly related to whether youth took psychotropic medication as did having a higher clinical score on the CBCL externalizing subscale ( $OR = 2.41, p = 0.02$ ) and on the composite score for both externalizing and internalizing subscales ( $OR = 2.66, p = 0.0006$ ).

**Table 1**  
**Predictors of Any Medication Use (N = 304)**

	Model 1		Model 2		Model 3	
	OR	p	OR	p	OR	p
<i>Placement</i>						
TFC or GH	1.63	.07	1.90	.02*	1.8	.04*
<i>Demographics</i>						
Gender			1.16	.65	1.13	.70
Race (White)			1.89	.02*	1.78	.04*
Age (>13)			.14	.001***	.15	.002**
<i>CBCL elevations</i>						
Externalizing					2.41	.02*
Internalizing					1.5	.52
Both					2.66	.006**

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

**Predictors of polypharmacy.** Among the youth who did take medication, stepwise logistic regression was also used to determine predictors of whether the youth was taking multiple medications (see Table 2). In the first step, context was entered but was unrelated to combined pharmacotherapy. The second step involved entering demographic variables, which revealed that youth less than 13 years of age ( $OR = 0.28, p = 0.002$ ) were significantly more likely to be taking more than one psychotropic medication. In the third step, clinical information was entered, indicating increased polypharmacy for youth with clinical elevations on both externalizing and internalizing CBCL scales ( $OR = 2.66, p = 0.02$ ).

**Table 2**  
**Predictors of Polypharmacy (n = 215)**

	Model 1		Model 2		Model 3	
	OR	p	OR	p	OR	p
<i>Placement</i>						
TFC or GH	1.01	.97	1.11	.75	1.21	.55
<i>Demographics</i>						
Gender			.74	.41	.79	.54
Race (white)			1.64	.11	1.43	.26
Age (>13)			.28	.002**	.24	.001***
<i>CBCL elevations</i>						
Externalizing					.80	.58
Internalizing					1.21	.79
Both					2.66	.02**

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Age and medication use.** Significantly more youth under 13 years of age (93%) were taking psychotropic medications compared to youth 13 or older (64%) ( $\chi^2 = 20.9$ ,  $p < .0001$ ). Similarly, among those prescribed psychotropic medications, youth under 13 years of age had a higher rate of polypharmacy (88%) than older youth (65%) ( $\chi^2 = 11.2$ ,  $p = 0.0008$ ). There were no differences between the two age groups on use of mood stabilizers, antipsychotics, and anxiolytics. However, youth over 13 years of age were more likely to be prescribed antidepressants ( $\chi^2 = 7.8$ ,  $p < 0.01$ ) and less likely to be prescribed stimulants ( $\chi^2 = 9.5$ ,  $p < 0.01$ ) than youth under 13 years of age.

**Placement and medication use.** Among those youth for whom medications were prescribed, there were no differences between TFC and GH in percentage of youth taking antidepressants, stimulants, or anxiolytics. However, TFC youth were significantly less likely to be taking antipsychotics ( $\chi^2 = 3.96$ ,  $p = 0.05$ ) and mood stabilizers ( $\chi^2 = 8.65$ ,  $p = 0.003$ ) even after demographic and clinical variables were added using multivariate modeling. Using multivariate modeling with demographic and clinical covariates added to placement type, results revealed a setting effect with GH youth being nearly two times more likely than TFC youth to take antipsychotics ( $OR = 1.86$ ,  $p = 0.04$ ) and youth with elevations on both CBCL scales ( $OR = 2.56$ ,  $p = 0.009$ ) and with BPRS psychotic scale elevations ( $OR = 2.48$ ,  $p = 0.005$ ) were two to three times more likely to take antipsychotic medication. Regarding mood stabilizers, multivariate modeling revealed a setting effect with youth in group homes being three to four times more likely to take mood stabilizers ( $OR = 3.345$ ,  $p = .0002$ ) and youth with elevated BPRS Mania/Hyperactivity subscales being two to three times more likely to take mood stabilizers ( $OR = 2.56$ ,  $p = 0.008$ ).

## Discussion

The results reveal that 67% of TFC youth and 77% of GH youth were taking psychotropic medications. Further, 47% of youth in TFC and 56% of youth in GHs were taking multiple medications. The results point to racial, age, clinical status and context specific differences in taking any psychotropic medications. Youth below age 13 and with CBCL elevations on internalizing and externalizing scales were treated with multiple medications. Other research echoes these findings lending support to the idea that polypharmacy is used for those youth who are difficult to treat and who are younger (Connor, Ozbayrak, Harrison, & Melloni, 1998; Safer et al., 2003).

Findings also reveal that the types of medications prescribed differed by setting such that group home youth were significantly more likely than youth in TFC to be prescribed antipsychotics and mood stabilizers. It is possible that because TFC youth reside in familial environments with Treatment Parents, they are less likely to receive any medications because the TFC focus on parent child relationships as a mechanism for managing aberrant behavior (Chamberlain & Moore, 1998; Chamberlain, Ray, &

Moore, 1996). Conversely, GH youth reside in more restrictive settings, and it is possible that they might receive those types of medications more widely prescribed in restrictive environments such as mood stabilizers and antipsychotics. The literature on developmentally delayed and mentally retarded youth in group home settings supports this assertion (Pumariega & Fallon, 2003; Spreat & Conroy, 1998).

Overall, the findings support previous literature which shows that youth in out-of-home residential care receive psychotropic medications and many are treated using multiple medications despite the fact the research base for polypharmacy for children and adolescents is limited (Connor et al., 1998). The findings from this research mirror those studies of hospitalized youth; similar rates of use exist between the TFC and GH youth and inpatient youth with severe psychiatric diagnoses (Rowland et al., 2002; Sourander, Ellila, Valimaki, & Aronen, 2002) and point to the importance of future research in the effectiveness of current pediatric psychopharmacology combined therapy practices (Jensen et al., 1999).

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## **Symposium Discussion**

### **Bringing It All Together: What Drives Outcomes in Treatment Foster Care and Group Homes?**

**Elizabeth M.Z. Farmer, H. Ryan Wagner, & Barbara J. Burns**

The papers in this symposium have examined variation in service provision and treatment in a variety of ways. This discussion returns to the conceptual/analytic model introduced at the beginning of the symposium to discuss how the various elements of this model influence outcomes for youth.

As noted, very little is known about outcomes of TFC and GHs as they are widely practiced. Findings from model TFC and GH programs suggest positive changes across time. The sparse evidence comparing the two settings suggests that each represent quite distinct treatment approaches, with GHs adhering to more of a peer-culture approach to treatment and TFC focused more on the importance of the adult-child relationship as a driving force behind positive development and change. This discussion builds upon results of the previous studies, as well as other key aspects of the underlying conceptual model, to examine outcomes for TFC and group homes. Outcomes for youth in GH in comparison with TFC youth are currently being analyzed.

Both cross-sectional and longitudinal data were used in these studies to examine key variables and outcomes. Data for these analyses include in-person baseline and discharge interviews with Treatment Parents, GH staff, and youth, along with telephone follow-ups with Treatment Parents and GH staff while the youth remained in care. Multivariate modeling included logistic and OLS regression as well as repeated measures analyses of change across time.

As noted in the initial overall model (see Farmer, Figure 1), we did not posit a direct relationship between conformity to national TFC standards of care and outcomes for youth. Our analyses confirm that there is not a direct relationship between these. We did, however, hypothesize that better conformity to standards of care would be related to several dimensions of implementation of the intervention at the individual home, child, and treatment family level. Here we found that higher conformity on Program standards (but not on the total score or other subscales) was related to several aspects of implementation. Higher conformity on the Program subscale was related to more consistent discipline/consequences for problem behavior ( $r = 0.23, p < .05$ ), better supervision of youth ( $r = .028, p < .01$ ), and more frequent meetings between Treatment Parents and supervisors ( $r = 0.16, p < .05$ ).

Analyses of outcomes can be conducted on a wide range of outcome domains. We focused on overall patterns of effects across outcomes (e.g., externalizing behavior, strengths, and functioning). In general, findings across domains varied in strength but showed a similar pattern. A variety of potentially important predictors emerged. For example, better supervision of the youth by the responsible adult was marginally related to better outcomes ( $r$ 's of 0.17-0.18 across outcome domains,  $p < .10$ ). More training for Treatment Parents was related to improved outcomes for youth ( $r$ 's of 0.20-0.28,  $p < .05$ ). Strength of the parent-child relationship showed a strong effect on outcomes ( $r = 0.36-0.51, p < .01$ ). This suggests that the adult-child relationship, which is central to the philosophical underpinnings of TFC, serves an important role in producing positive outcomes.

Analyses also suggest that the key factors influencing outcomes changed across time, as a youth remained in care. During the initial months of treatment (up to about nine months), the frequency of meetings between the Treatment Parents and their supervisor was a significant factor influencing outcomes. However, the effect of this factor disappeared as the youth remained in care, and other factors became more significant. Key among these new factors was the quality of the relationship between the Treatment Parent and the youth. These analyses are currently being extended and expanded to more fully examine aspects of the conceptual model and to include analyses of outcomes for youth in group homes.

Overall, this symposium focused on TFC and GH care in a state-wide representative sample of each setting. Findings highlighted the tremendous variation in implementation of TFC and substantial differences between “real world” and evidence-based TFC. We found that youth served in TFC and GHs were very similar on most demographic and clinical factors. However, the types of treatment that youth received in conjunction with these settings were quite different. In particular, youth in TFC were more likely to receive community-based proactive services, while youth in GHs were more likely to receive more restrictive, associated services. Compared to youth in TFC, youth in GHs were also more likely to receive medication, particularly polypharmacy. Outcome data for youth in TFC (outcomes for youth in group homes are not yet available) showed that youth improved across time while in treatment. Agency-level conformity to national standards of care was not directly related to improved outcomes. However, conformity was related to several processes and mechanisms that led to better outcome; key factors here appeared to be Treatment Parent training and supervision. A positive relationship between the Treatment Parent and the youth appeared to be the strongest predictor of positive outcomes.

This set of findings provides the first large-scale examination of TFC in a representative sample of TFC agencies. They suggest that real world TFC differs substantially from both national standards of care and Chamberlain’s evidence-based model of TFC. However, factors that have been shown to influence positive outcomes in evidence-based TFC appear to operate similarly in this broader range of TFC programs. These findings suggest the importance of key mediators and of the need to strengthen real world TFC in these areas. Comparisons between TFC and GHs suggest that these settings are serving similar youth, but serving them quite differently. Future work comparing mediators and outcomes across settings should provide guidance on improving services for youth within and across

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# **Mental Health Care for Child Welfare Clients**

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**Ilene R. Berson  
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Stephen Roggenbaum  
David Baker**

## **Introduction**

Children in foster care have a myriad of socio-emotional needs, which can adversely affect long-term adjustment, placement stability, and permanency outcomes. While abuse is not a disorder or syndrome, mental health problems are a common result (Finkelhor & Berliner, 1995).

The risk factors and high incidence rate of psychopathology among children in foster care placements necessitate concurrent attention to clinical needs and child welfare goals for permanency. This dual directive suggests that the mental health needs of children in care may be qualitatively and quantitatively different from the general population of children and may necessitate specialized service delivery (Lyons, Libman-Mintzer, Kissiel, & Shallcross, 1998).

Despite research that confirms a susceptibility to psychopathology among children in out-of-home care, we lack an in-depth assessment of the psychological and social functioning of children in the child welfare system. In addition, a comprehensive summary of the nature of these interventions has not yet been developed.

## **Method**

The Agency for Health Care Administration (AHCA) contracted with the University of South Florida's Louis de la Parte Florida Mental Health Institute (FMHI) during FY2001-02 to complete clinical case studies on currently open Department of Children and Families (DCF) foster care cases in the west central Florida region.

This study included 21 youth ages 10-17 years old, in current foster care placement for at least six months, who had undergone termination of parental rights (TPR), who resided in the west central area of Florida, and were Medicaid enrolled (Berson, Vargo, Roggenbaum, & Baker, 2002).

The case studies consisted of a triad of semi-structured interviews with a youth, a caregiver, and a primary behavioral health service provider. Interviews focused on service utilization, treatment plans, and the nature of mental health interventions. In addition, standardized assessments of the child's functioning were completed using the Child Behavior Checklist/4-18 (CBCL; Achenbach & Edelbrock, 1983; Achenbach, 1991), the Youth Self Report (YSR; Achenbach & Edelbrock, 1983; Achenbach, 1991), and the Trauma Symptom Checklist for Children (TSCC; Briere, 1996).

## **Results**

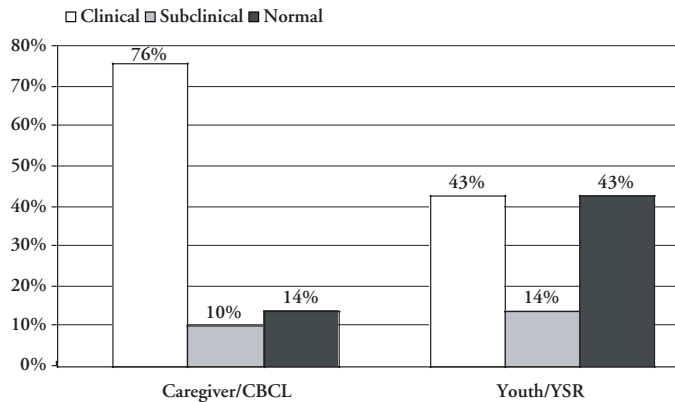
### **Clinical Assessment**

As noted in Figure 1, 76% of caregivers rated the child's behavior problems at a clinical level. Conversely, the youth tended to minimize the severity of their problems, with 45% self-assessing within the clinical range. Analysis of the clinical assessment profiles (CBCL, YSR, and TSCC) indicate that several youth are at a greater risk for a variety of problems, including disruptive behaviors and anger. Overall, the effect of problem areas assessed could have adverse consequences for long-term social adjustment, placement stability, and permanency options

### **Behavioral Health Service Use**

Youth, Caregivers and providers described a broad range of therapeutic interventions provided to the child. Overall satisfaction with services was high; however, services tended to emphasize behavioral outcomes.

**Figure 1**  
**CBCL & YSR Total Problems**



Based on a review of treatment plans, Table 1 shows the percentage of service plan goals related to specific areas of focus. Only a few providers reported goals specific to permanency outcomes (14%) or issues associated with loss and separation (5%). Generally, caregivers and youth were involved in the development of treatment goals. The majority of providers sought the caregivers' input to adapt services to conform to their belief systems while fostering strategies to engage the caregivers in a partnership on behalf of the child's treatment.

**Table 1**  
**Service Plan Goals**

<i>Focus of Goals</i>	<i>Percent of Service Plans</i>
Behavioral Outcomes	48%
Skill Development	38%
Abuse Issues	28%
Permanency Outcomes	14%
Pharmacological Intervention	5%
Loss	5%

The majority of youth and caregiver respondents found that the location, time and frequency of services were convenient. Several families noted that services that were less structured and activity-based were most beneficial to the child's functioning.

Continuity of staff was important for investing the youth in the therapeutic relationship and providing a safety net from the repetitive loss of significant people in a child's life.

**A Look at the System: The Provider Perspective**

Most providers were trained in social work or mental health at the undergraduate and often graduate level. The majority had been in their current position less than four years; however, many had attended trainings on child and family engagement, safety, specific therapeutic techniques, and child welfare system issues. A paucity of therapists who specialize in sex abuse therapy was noted.

Providers reported that child welfare agencies are "overwhelmed" and that providers did not have enough time to spend with families due to heavy caseloads. Frequent turnover of state workers was also attributed to large caseloads.

Before clinical activities can be introduced, the providers must take time to actively engage families and form a trusting relationship with the youth. Once families are engaged, maintaining momentum and motivation in the context of respect and honesty is critical.

Interagency communication and collaboration directly benefit both children and families. Providers mentioned the need to share information, within limits of confidentiality, with each other to ensure appropriateness of services and non-duplicative services.

Providers reported a need for more financial investment in identifying placement options, supporting foster parents, providing individualized therapies, and providing transportation.

### **A Case Study: Carlos and Self-Preservation Among Failed Adoptions**

Carlos is a 16-year-old Hispanic male in the 10<sup>th</sup> grade. Carlos is a good athlete and enjoys playing football. His school performance is average, and he is involved in the Boys and Girls Club. Carlos came into the child welfare system as the result of child protection issues, with a possibility of sexual abuse.

Carlos has been bounced around a lot from placement to placement and has experienced many failed adoptions due to his behavior problems. Carlos reported that he feels counseling is “to let out all the stuff I’ve done in the past – so it isn’t bottled up.” Carlos also asserts that services have helped him realize, “I can be good and can do anything I put my mind to.”

The YSR score for Total Competence was in the clinical range, but scores for Activities and Social were normal. Carlos has at least one close friend and sees him on a regular basis. Total Problems and Externalizing Behaviors fell into the subclinical range and were most similar to the Social Problems profile.

Scores on the TSCC were normal with the exception of a subclinical score on Dissociation and a clinical score on Dissociation–Fantasy. Carlos reported frequently “pretending I’m somewhere else” and “going away in my mind and trying not to think.” This dissociation correlates with provider reports that Carlos has put up a hard shell and won’t let anyone get close to him because he has been forced to change placements so often. The detachment may also be associated with the sexual abuse that the provider has only recently “started to address.”

Carlos receives Medicaid-funded individual therapy from a male provider on a weekly basis. The provider tries to incorporate some behavior management and cognitive behavioral techniques, while engaging Carlos on an informal basis during neighborhood baseball games. The provider also serves as a positive role model and mentor for Carlos.

Carlos has been moved too many times to facilitate healthy attachment and any development of trust. According to the provider, “Carlos is very closed emotionally. [He has been] rejected so many times he has a shell around him. The boys believe they will [be] hurt if they open up. Carlos has almost given up on a permanent family. He is pretty much just in a self preservation mode.”

Carlos is also aware of multiple courtroom battles for custody of himself and his brother. These long and drawn out court proceedings have proved detrimental to Carlos’ emotional stability. The provider acknowledged that the placement instability exacerbates Carlos’ behavior problems and openly stated, “the fact that we did not resolve that has created a problem.”

Carlos is fortunate in the sense that he seems to have a high level of resiliency and the provider works to positively reinforce these qualities. The provider is well matched to Carlos in terms of gender and willingness to conduct therapy sessions during ball games. However, Carlos seems to have gone from an unsafe but permanent and intact biological family to being safe but separated from loved ones and in a series of unstable living environments.

## **Discussion**

### **Implications for Policy and Practice**

Service providers need a working understanding of the child welfare system, family dynamics, realistic behavioral /achievement expectations for youth, impact of separation/loss on a child’s behavior, and emerging evidence for effective treatment.

Treatment plans must promote the active involvement of foster parents and involve youth in the decision-making process. Youth and caregivers expressed a preference for engaging and creative services, which provide realistic strategies for mediating aggression and disruptive behaviors. Natural supports in the community also are critical to providing ongoing support to the youth and family.

Engagement of the youth is dependent on creating safe and stable supports that can sustain periods of struggle. Safety issues shift from a focus on physical safety to an emphasis on emotional safety,

i.e., security from further loss and separation. Ideally continuity in staff can evolve into a trusting relationship. Given the reality of staff transitions, goals that address relationship loss provide a context for assisting youth with recurrent attachment disruptions, allow the child to debrief, and foster closure before learning to reengage with others.

Goals of treatment should be associated with permanency outcomes. Foster families and the youth require ongoing services that can address complex and interrelated problems. For example, the disruptive and aggressive behaviors that were common among the participating youth in foster care also negatively affect the success of placements and options for permanency. Furthermore, funding mechanisms need to be examined to ensure that continuity in access to services is not adversely affected by evidence of progress toward treatment goals.

### **Conclusions**

A sense of belonging and connectedness is crucial for a child's long term functioning. While the foster care experience, combined with the abuse and neglect that resulted in foster care placement, can create barriers to promoting well-being in youth, the positive development of young people can be achieved through supports, stabilized care, and coordinated services.

Child welfare goals of permanency and placement stability need to be incorporated into the behavioral treatment plan to help ensure that coordination of service delivery emphasizes common desired outcomes for the youth and includes transition planning.

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# **Adolescent Girls in Transition**

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## **Introduction**

When Congress passed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA, P.L. 104-193) in August 1996 the face of welfare in the country was dramatically altered.

Known as the Temporary Assistance for Needy Families Program (TANF), the primary goal of this legislation was to assist recipients in becoming economically self-sufficient.

Much of the early research examining the impact of welfare reform focused on maternal outcomes such as employment and earning with little emphasis placed on children (Children Now, 1998). Furthermore, the initial research involving children primarily focused on younger children, considered to be the most vulnerable to the effect of mothers' work requirements with substantially less attention having been placed on adolescents (Gennetian, et al., 2002). However, several recent studies focusing on adolescents suggest they may be negatively impacted by welfare reform initiatives. For example, Bloom, et al.'s (2000) study of the Florida's Family Transition Program found that despite increased family earnings among welfare participants, adolescents had poorer school outcomes and increased behavioral problems. Zaslow et al.'s (2001) review of experimental studies of various welfare reform initiatives implemented in numerous states, including Florida, found "...fairly consistent and unfavorable patterns of impacts for adolescents across programs types and economic impact patterns" (page 89). Negative adolescent outcomes included poorer school performance, increased behavioral problems at school, higher rates of reported drinking, smoking, and drug use, and higher rates of delinquent behavior. No significant impact was found on adolescents' health status.

Most of these investigators have hypothesized that the negative effect of welfare initiatives on adolescents may be related to either the erosion in parenting quality and monitoring of children's behavior or the increased responsibilities placed on these adolescents (Bloom, et al. 2000; Gennetian, et al. 2002; Zaslow et al. 2001). Some evidence supporting these hypotheses were found in Rangarajan and Johnson's (2002) evaluation of New Jersey's Work First program in which they found that 39% of 13 to 17 year olds spent some time unsupervised and that 27% of the caregivers of adolescents often did not know who their child was with.

Of further concern is the fact that findings from some studies suggest that these negative effects may be even more devastating to girls (Taylor, 2000). Such findings have resulted in investigators stressing the need for early interventions to assist girls in "breaking the cycle" (Brooks & Buckner, 1996). It is known that the likelihood of being on welfare is increased if one is raised in a family receiving it. Furstenberg, Hughes, and Brooks-Gunn (1992) for example, noted that although 80% of the daughters of welfare mothers do not become dependent themselves, they are more likely to receive welfare (approximately 20%) compared to daughters of nonwelfare mothers (about 3%).

The purpose of this study was to determine what factors differentiate adolescent girls whose mothers are enrolled in TANF who are fairing well and whose lives are seemingly on a positive trajectory from those girls facing more serious challenges. Additionally, the study attempted to determine what supports would be helpful to the teenage girls facing challenges, in order to assist them in making a successful and productive transition into adulthood. The specific questions the study is designed to address are:

- What is the prevalence of various risk and protective factors among these adolescent girls?
- How are these adolescent girls doing in terms of health-related issues, academic performance, and social behaviors?

- To what extent is the presence of risk and protective factors associated with these adolescents' current wellbeing?
- To what extent is the presence of risk and protective factors associated with these teenage girls' hopes and aspirations?
- How do these girls fare over time?

## Method

The study involved a mixed-method, two-phase descriptive study. In Phase 1, face-to-face interviews were conducted with 125 TANF mothers and their daughters (see Table 1). The interview protocol included a number of previously validated self-report standardized measures to assess the daughters' health, mental health and substance abuse status, social supports, self-esteem, engagement in high risk behaviors, significant life events, and future hopes and aspirations. Additionally, comprehensive information was collected on various child and family demographics. In Phase 2, a random sample of 20 of the 125 adolescent girls was selected to complete in-depth open-ended interviews. Both phases of the study were supplemented with existing administrative data on the daughters' health, mental health, and substance abuse service use.

**Table 1**  
**Characteristics of the Mothers and Daughters**

<i>Characteristics</i>	<i>Mothers (n = 125)</i>	<i>Daughters (n = 125)</i>
<i>Gender:</i>		
Female	100%	100%
<i>Age:</i>		
Mean	38.4	15.50
SD	4.99	.99
Range	30 - 53	13 to 17
<i>Race/Ethnicity:</i>		
White	40.7%	33.6%
Black/African American	38.2%	40.8%
Hispanic	21.1%	25.6%
<i>Marital status:</i>		
Married or living as married	12.8%	0%
Divorced, Separated, or Widowed	54.4%	0%
Never married	32.8%	100%
<i>Education:</i>		
Dropped out of school	50.4%	28.0%
Completed high school	49.6%	NA
<i>Length of time on TANF:</i>		
Less than 6 months	15.4%	NA
Six months to 1 year	18.7%	
1 to 2 years	23.6%	
Over 2 years	42.3%	
<i>Housing arrangement:</i>		
Private house or apartment	70.4%	All of the adolescent girls were living at home
Private house or apartment shared with friends or family	12.8%	
Public housing	13.6%	
Other	3.2%	



## **Analysis**

Descriptive analyses were conducted using data from Phase 1 to estimate the prevalence of risk and protective factors among these adolescent girls. Additionally, descriptive analyses were conducted to examine their current health and mental status and their future hopes and aspirations. Regression analyses were conducted using Phase 1 data to assess the extent to which the presence of risk and protective factors and current status were predictive of these adolescents' future hopes and aspirations. Content analyses of the in-depth interviews were conducted to identify the themes and uniqueness among the girls' perceptions regarding how they were doing and what they perceive the future to hold.

## **Results**

### **Risk and Protective Factors**

On average, the girls had 3.25 protective factors ( $SD = 1.71$ ), ranging from 0-8. More frequent was strong parental social supports (65%), followed by meaningful involvement of a father figure with the daughter (52%), good school performance (51%), and strong peer social supports (35%). The adolescents averaged 2.58 risk factors ( $SD = 1.21$ ), which ranged from 0-6. The absence of a father figure was most frequently noted (48%), followed by poor school performance or having dropped out of school (34%), housing instability (18%), and very low socio-economic status (14%).

### **Current Status**

The current status of the adolescent girls was examined in three domains: health, school, and teenage behaviors. With respect to health, 14% were reported to be in fair or poor health, and 24% scored above the criterion score on a mental health screen, suggesting a need for further psychosocial evaluation. Finally, 12% were likely to have an existing substance abuse problem.

In terms of school, 28% of the girls had already dropped out of school. However, of those remaining in school, 74% reported maintaining a B average or better, two thirds indicated that they were staying out of trouble, and 54% indicated they had participated in study groups or after school activities during the month preceding the interview.

With respect to teenage behaviors, nearly half of the girls had been sexually active, and 16% had been pregnant. Four out of ten girls smoked, and 35% had ridden in a car with someone drinking. In contrast, over two thirds reported doing volunteer work in the month before the interview.

### **Future Aspirations**

A forward stepwise regression was conducted to determine if various risk and protective factors, current status measures, and demographic variables were predictive of the adolescent girls' future hopes and aspirations. Twenty-three independent variables were used to predict future hopes and aspirations. The variables included:

- Demographics (age, race)
- Total risk and protective factors
- Child traits (self-esteem, life events, locus of control, quality of life)
- Child behaviors (still in school, has had sex, been pregnant)
- Current status (health, mental health, substance abuse)
- Social supports (parents, teachers, friends, classmates)
- Mothers' reports of daughter (health, mental health, substance abuse, life events, quality of life, future hopes and aspirations)

A four variables model emerged that included teacher support, mental health status, negative life events, and parental support, accounting for 58% of the variance in these girls future aspiration,  $F(4,103) = 34.72, p < .001$ . The presence of teacher and parental social supports in these girls' lives were associated with more positive future goals and aspirations, while the presence of mental health symptoms and negative life events were associated with a less positive outlook on the future.

### **Phase 2 Results**

The findings from the Phase 2 interviews are organized around the areas of risk and protective factors, current status, and future hopes and aspirations. A content analysis of the interviews supported the importance of teachers and the girls' mothers in the lives of these adolescents, and highlighted the variability in the girls' perceptions regarding the amount of control they perceived over their lives. In addition, the daughters' goals and aspirations reflected their age, their experiences, and their circumstances. Younger daughters were able to articulate what they want to be, but were not clear as to what it would take to reach that point, while the older ones had a clearer understanding of what was involved in reaching their goals.

The experiences of the daughters were reflected in their desires to be financially and emotionally stable before having children. While not all of them live in single- family homes, they expressed a preference for having children after marriage, and when they could provide for their children. They know the difficulties and expenses associated with parenting.

Their circumstances at the time of the interviews were also reflected in the girls' dreams and aspirations. Those who have good grades and the possibility to access scholarships seemed to be more certain about being able to reach their educational and professional goals. Those whose grades may not be as good but whose family can gather the financial resources to send them to college also seemed certain about reaching their goals. Those who appeared to have less access to resources were not as certain about reaching their educational goals.

### **Conclusions and Next Steps**

The results from the first year data collection suggest that many of the girls interviewed had positive outlooks for their futures that were independent of factors such as having dropped out of school or having had a child. Social supports, particularly from teachers, were found to be an important predictor of how these girls viewed the future.

The collection of one-year follow-up data with these 125 mothers and their daughters is currently underway and data collection should be complete by May 2003. Increased emphasis is being placed on social supports and quality of life in the Phase 1 interviews, given the importance of these variables found in year 1. Further qualitative analysis of interview transcripts is currently focusing on social support, and is differentiating types of social support among concrete aid, emotional support, esteem support, and information. Finally, expanded use of other administrative data on these girls including educational and juvenile justice data, will be included next year. A complete copy of the Year 1 report of this study can be found on-line at: <http://www.fmhi.usf.edu/institute/pubs/pdf/ahca/2002-adolescent-girls-welfare-reform.pdf>.

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# **Welfare Reform: Do We Need To Think About Teen Pregnancy Prevention and Intervention?**

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Svetlana Yampolskaya**

Acknowledgements: *This study was funded by the WAGES Coalition of Hillsborough County, Florida.*

## **Introduction**

With the rising cost of teenage pregnancies, increased attention has been paid to the effectiveness of programs designed to educate and counsel teenagers on how to prevent the risk of pregnancy. Two such programs have been implemented in Hillsborough County, Florida in order to reduce the number of pregnant and parenting teenagers who may eventually depend on public assistance. The Postponing Sexual Involvement Program (PSIP) is a prevention program targeted at middle-school-aged students, and the Intensive Teen Case Management program (ITCM) is a pregnancy intervention program designed to assist pregnant adolescents and to prevent subsequent pregnancies during adolescence. This study examines outcomes for students enrolled in these two teen pregnancy programs and develops a set of recommendations to increase program effectiveness.

For the students enrolled in the PSIP, four major outcomes were examined. These include whether the programs had any effect on: (a) educational and career intentions, (b) judgments about single and adolescent parenthood, (c) knowledge about risks associated with sex, and (d) involvement in problem behaviors. The outcomes were assessed shortly after the students finished the program and two years later. In addition, the effect of the ITCM program on girls' pregnancy and health was assessed.

## **Method**

The study design consisted of three parts. The first part included a comparison between the experimental group (students who participated in the PSIP approximately two years prior to the survey  $n = 87$ ) and the control group (students who did not participate in this prevention program  $n = 73$ ). The second part consisted of a longitudinal comparison ( $n = 137$ ) between two cohorts: (a) students who participated in the PSIP and were surveyed shortly after the program concluded, and (b) students who participated in the PSIP and were surveyed two years later. Overall, there were 160 surveyed participants. The last part of the study gathered qualitative data via in-depth interviews with the ITCM participants ( $n = 10$ ) and their nurses ( $n = 4$ ) regarding the effect of services on girls' pregnancy and health. Ten girls and four nurses were interviewed.

Statistical analyses consisted of chi-square and ANOVA tests for quantitative data, while qualitative thematic analysis (Huberman & Miles, 1994; Hycher, 1985; Patton, 1990) was used to analyze the qualitative data.

## **Results**

### **Short-term Outcomes for PSIP Participants**

Comparison of overall scores for students from the PSIP schools and the control group on academic competence resulted in no significant differences (see Table 1). However, when these groups were compared on specific school-related activities, a significantly higher proportion of students in the PSIP schools indicated that they liked learning at school very much or a little, compared to students from the control school,  $\chi^2(1, N = 184) = 4.26, p < .05$ . A high proportion of students from both the PSIP schools (86.3%) and the control group (82.2%) indicated that they would like to go to college and pursue professions that require intensive training (e.g., a medical doctor, an architect), however, proportions for these two groups were not significantly different.

**Table 1**  
**Comparison of PSIP Participants and Students**  
**from Control School on Academic Competence (N = 184)**

Variables	Schools (n = 139)		Control School (n = 45)		F <sup>a</sup>
	M	SD	M	SD	
Learning	3.65	1.29	3.33	1.28	0.15
Organized activities	3.67	1.18	3.71	1.10	0.85
Sports in school	3.87	1.20	4.33	0.90	5.65***
Grades	6.48	1.74	5.88	2.10	3.61*
Liking teachers	3.12	1.24	3.55	1.19	3.99**
Friends at school	4.43	0.92	4.53	0.99	0.40
Overall liking of school activities	18.70	3.02	19.37	2.83	1.77

Note. <sup>a</sup>df = 1.

\* $p < .10$ . \*\* $p < .05$ . \*\*\* $p < .01$ .

### **Long-term Outcomes for PSIP Participants**

A significantly higher ( $p < .05$ ) proportion of older PSIP participants (i.e., the ones who finished the program two years prior to the survey) had definite plans to go to college and chose a profession that requires intensive training. When the age variable was controlled, the difference was still statistically significant. In addition, the older cohort of PSIP participants participated in and enjoyed more extracurricular activities at school compared to the PSIP participants who had just finished the program.

A higher proportion of the older PSIP participants expressed the intention to postpone beginning sexual relations compared to the PSIP participants who had just finished the program. However, no statistically significant differences were found between the older PSIP participants and those who had recently completed the program when asked about their intentions to get married and to become parents within the next three years.

### **Outcomes for ITCM Participants**

Interviews with pregnant and parenting girls indicated that they face many challenges when dealing with pregnancy and parenting. The girls felt angry and depressed about their pregnancies, they were fearful for the future of their babies and themselves, they realized that it would be difficult to graduate from high school, and they experienced emotional strain from the pressure of balancing these two areas of their lives. Girls' perceptions of the nurses and the help they received from them reflect that these nurses played a very important role. One of the major themes that emerged from these interviews concerned the value girls placed on having an understanding and supportive relationship with a dependable adult figure. The adolescents acknowledged the importance of the psychological and social help, medical advice, and other related assistance that the nurses provided.

### **Nurses' Perceptions**

Nurses stressed that the ITCM program could be improved through an increase in mentoring resources for the girls. Second, nurses believed that their program needed more follow up assistance. A nurse also suggested that the program needed to be set up in such a way that part of it was mandatory, particularly classes that deal with behavior problems and bad habits. In addition, nurses expressed concern about the psychological and mental health issues of some girls, and the problems that can result from noncompliance with program recommendations.

## Discussion

Overall, the study found that the two examined programs had a positive impact on the participants. Study findings revealed that the PSIP groups did experience positive outcomes in the area of academic competence and career orientation. This finding is particularly significant considering that most participants in the pregnancy prevention programs came from disadvantaged, low-income, single-parent families, where the majority of parents had little or no education. A number of studies (Cook, Church, Ajanaku, & Shadish, 1996; Parelius & Parelius, 1978; Ramey & Ramey, 1990; Smith-Maddox, 1999) have shown that children from middle- and upper-middle-class families have higher educational and career goals than children from poorer families. Though improved outcomes in academic competence are not directly linked to teen pregnancy prevention, this finding is very important. A recent study conducted by Lonczak, Abbott, Hawkins, Kosterman, & Catalano (2002) and Scaramella, Conger, Simons, & Whitebeck (1998) indicated that academic success, social competence, and bonding to school are associated with reduced teen pregnancy rates, more careful sexual practices and better health consequences in early adulthood.

It also appears that the PSIP program has a long-term effect on the participants. A higher proportion of the program enrollees who finished the program two years prior to the survey had serious intentions to attend college and chose a profession that requires intensive training than did students who had just completed the program.

The ITCM program also seems to have had a positive effect. The value girls placed on having an understanding and supportive relationship with a dependable adult figure emerged as a major theme from these interviews.

The results of the present study can be useful and are applicable in a general sense to improving similar teenage pregnancy prevention programs across the country. Based on analysis of the data, recommendations have been made to increase the effectiveness of the programs and enhance their benefits to the participants. Much emphasis has recently been placed on welfare reform and new limitations for receiving welfare benefits, making the incidence of teen pregnancy an even more critical issue. Teen mothers are often deficient in education and career skills, yet are financially responsible for the care of the child. Many young mothers find it particularly difficult to meet the new welfare reform requirements. In recognition of this problem, the teen pregnancy prevention initiative reviewed in this study was designed under the auspices and funding of local welfare reform planning.

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# **A Study of Foster Care as a Protective Factor for Maltreated Youth: Initial Report of the Casey Northwest Alumni Study**

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## **Introduction**

The Casey Northwest Alumni Study evaluates the intermediate and long-term effects of family foster care on adult outcomes. This investigation focuses on adults maltreated as children who were served by different agencies and models of family foster care between 1988 and 1998. A number of characteristics of the most and least successful of these adults (i.e., Northwest Casey alumni) are being examined to provide guidance for program design in public and private social service agencies. These include risk factors, protective factors, and adult functioning in a number of areas, including mental health. The focus is on identifying what services and other factors result in positive alumni outcomes. In addition, all other Casey alumni served between 1966 and 1998 are included as a point of comparison for this study. Both alumni studies are informed by a conceptual/theoretical model of evaluating services that considers a range of child, family, community, foster home and other factors in explaining the functioning of alumni as they leave foster care and create new lives for themselves.

The School of Social Work at the University of Washington, the Department of Health Care Policy at Harvard University Medical School, and the Survey Research Center at the University of Michigan are working with three social service organizations to conduct the study: (a) Casey Family Programs (Casey); (b) State of Washington Department of Social and Health Services, Children's Administration, Division of Children and Family Services; and (c) Oregon Department of Human Services; Children, Adults and Families; Community Human Services

The four main research questions for the Northwest study are:

1. How are maltreated youth who have been placed in foster care faring as adults? Do they differ from other adults with regard to functioning status?
2. Are there certain key factors or program components such as placement stability, individual mental health services, groupwork, employment training, and employment experience that are linked with better foster care alumni functioning?
3. Which youth, controlling for specific program interventions, are most at risk of poor long-term outcomes? (And conversely, what are the characteristics of the youth and their circumstances that are linked with positive functioning?)
4. Is one particular approach to family foster care better than another approach for certain types of youth, including those who have had certain kinds of life experiences before placement?

## **Methods**

*Casey Northwest Foster Care Alumni Study sample.* We have interviewed a sample of 111 Casey alumni from Washington and Oregon. We have also interviewed 242 public foster care alumni from the state of Washington Division of Children and Family Services and 126 alumni from Oregon Community Human Services (Multnomah County). Sample matching criteria used to select cases using computerized and paper case records include the following: (a) geographic location, (b) placed in family foster care, (c) length of time in family foster care (12 months or more), and (d) no severe physical or intellectual disabilities were present (alumni who were unable to live independently in the community were identified via case records or agency management information systems).

The total sample size is 659 alumni, 479 of whom have been interviewed. All of these alumni were between the ages of 20 and 33 at the time of the interview, had been placed with a foster family from that agency for 12 months or more, and were discharged from foster care at least 12 months previously.

**Casey National Alumni Study sample.** In addition to the sample of alumni in the Northwest Study, alumni previously served by Casey in Washington and Oregon prior to 1988, and all other Casey alumni in all other locations served between 1966 and 1998 were included in a Casey National Alumni Study sample. Therefore, this special sample focuses on the nature of services and outcomes of 1,609 alumni served by all of the Casey offices providing foster care services from 1966 to 1998, who met the same sample criteria as the Northwest study except for the geographic and years of service limitations (1,087 Casey alumni were interviewed for this study). This group will serve as a point of comparison for the Casey Northwest study sample.

The research data were collected through case record reviews and interviews with alumni. Data collected from the case records included alumni demographics, dates of entry and exit from foster care, replacement rates, some foster family information, type of exit from foster care, reasons for original child placement, child maltreatment, and some information about one or both birth parents, including family composition, parent functioning, drug and alcohol usage, and termination of parental rights. Raters, without knowledge of the hypotheses of the study, individually read and recorded the information from case records. Professionally trained interviewers from the University of Michigan Survey Research Center administered the alumni interview, which contained a number of standardized scales.

An important feature of this study is the utilization of several sections from the Composite International Diagnostic Interview (CIDI). The CIDI is a World Health Organization (WHO) approved non-clinician administered psychiatric diagnostic interview, which was developed to facilitate psychiatric epidemiological research; it generates mental health diagnoses for conditions such as depression, anxiety, and substance addiction. More specifically, sections of the Composite International Diagnostic Interview (CIDI 2.1) and supplemental sections developed from the CIDI 2.0 by the University of Michigan are included in the interview (Robins, et al., 1989; WHO, 1996). The Conflict Tactics Scale (Gelles & Straus, 1988), Trauma Symptom Checklist (Briere & Runtz, 1989), and supplemental interview questions from the University of Michigan Institute for Survey Research are also used.

## **Early Results**

Because we contracted with specialized location staff, and were fortunate to work with some highly dedicated interviewers from the University of Michigan, we were able to find and interview 75.7% of the eligible alumni in the Northwest Alumni Study (73.2% in the National sample). This is a very positive response rate—due in part to the extremely low interview refusal rates by the alumni (5.5% in the Northwest study, 3.8% in the Casey National sample).

**Services received while in foster care.** The most common services received while in foster care, in rank order of use, are: (1) mental health treatment, (2) employment experience, (3) transition services/independent living training, (4) group work, (5) tutoring, and (6) employment training.

**Selected post-discharge outcomes.** The high school graduation rates and employment rates were positive for many alumni. This occurred despite many placement changes (these rates decreased significantly after youth entered Casey services). Yet, median alumni personal and household income was below those of the general population for the time period under study. Furthermore, one-fifth of the alumni were homeless for one night or more within a year after leaving foster care. For more information, see [www.casey.org](http://www.casey.org).

In contrast, mental health diagnoses as measured by the CIDI indicated much lower rates of mental health problems in the previous 12 months versus lifetime rates. A small but disproportionate percentage of alumni suffered from panic disorder, generalized anxiety disorder, drug dependency, PTSD, and bulimia.

## **Conclusion**

If these early data trends hold true with forthcoming multivariate analyses, some implications warrant further investigation. Foster care can be a key resource for protecting children from further child maltreatment, meeting medical needs, and helping children develop in healthy ways. Furthermore, practitioners, policymakers, foster parents, and the general public can help improve the odds for youth in foster care for alumni to be successful by focusing on educational supports, timely mental health services, employment and other life skills preparation, and by reducing placement changes. Because 20,000 children emancipate from foster care every year, life skills preparation needs to be improved—preparation for emancipation should begin at age 12, and not at age 17. Last, more workers need to have an overall practice framework, use practical assessment tools such as the Ansell-Casey Life Skills Assessment (ACLSA; Casey, 2000), use low-cost life skills curricula, and skill-building experiences such as volunteer and employment internships.

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